

INNOVATIONS IN ENUMERATION PROCEDURES, DEFINITIONS USED,  
AND DATA COLLECTED IN THE 1960 CENSUSES  
OF POPULATION AND HOUSING

A THESIS

SUBMITTED TO THE FACULTY OF THE DEPARTMENT OF SOCIOLOGY,  
ATLANTA UNIVERSITY, IN PARTIAL FULFILLMENT OF THE  
REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS

BY

MARSHA L. GOODWIN

DEPARTMENT OF SOCIOLOGY

ATLANTA, GEORGIA

AUGUST 1968

R = V

T = 80

## ABSTRACT

This is a study of the 1960 censuses of Population and Housing and the census innovations which were designed to start a new trend in census history. The major aim of the thesis is to describe these innovations and to determine whether or not they may be recognized as positively progressive elements in the structure of the census itself and to the sociologist.

The thesis is written in three major parts. The first part introduces each innovation in enumeration procedures and discusses the reason for its inclusion in the 1960 census. The second part introduces the innovations both in definitions used by the Census Bureau and in the type or form of the data collected during the enumeration. The third section analyzes the sociological literature appearing in major sociological journals for two five year periods. The journals are analyzed for the periods 1952-1956 and 1962-1966 in order to determine the number of articles appearing which used census data and in order to determine something of the content of such articles and the type of census data which were used.

In 1960 the United States Bureau of the Census introduced a number of innovations in enumeration procedures, definitions used and data collected. This number of innovations was one of the greatest in census history; and the Bureau of the Census assumed that they would save time, lower costs, and provide more accurate data.

In this study it has been found, however, that the innovations fell far from the goals of the Bureau. Most of the procedural innovations,

especially when operating as a unit of procedures rather than individually, were seen to either show no measurable difference from the methods of earlier censuses, or actually were found to have increased the time necessary for the actual enumeration. The innovations in definitions used and data collected did help to clarify the resultant census data. This clarification is seemingly negligible, however, because they did not seem to increase the use of census data by sociologists by any noticeable degree.

The content analysis of the literature, using The American Journal of Sociology, The American Sociological Review, and Social Forces as sources for data, showed that no significant increase in the number of articles published using census data occurred for the 1962-1966 period over the 1952-1956 period. The type of census data used in the 1960's also tended to be similar in nature to the type used in the 1952-1956 period. From this analysis, one would conclude that the 1960 census innovations had little measurable effect on the quantity or quality of census-based articles in the 1960's.

From these total results the 1960 census innovations are recognized as modifications which showed little or no measurable improvement over previous census procedures, and thus cannot be recognized as positively progressive elements, or simply progress.

## TABLE OF CONTENTS

|  | Page |
|--|------|
| LIST OF TABLES. . . . .  | v    |
| <br>Chapter  |      |
| I. INTRODUCTION. . . . .                                       | 1    |
| History and Background. . . . .                                | 1    |
| Statement of the Problem. . . . .                              | 7    |
| Hypothesis. . . . .  | 8    |
| Purpose of the Study. . . . .                                  | 8    |
| Scope of the Study. . . . .                                    | 8    |
| Methodology . . . . .  | 9    |
| II. INNOVATIONS IN ENUMERATION PROCEDURES . . . . .            | 12   |
| The Pre-Enumeration Process . . . . .                          | 12   |
| Changes in Procedure. . . . .                                  | 14   |
| Extension of Sampling . . . . .                                | 15   |
| Callback and Closeout . . . . .                                | 16   |
| The New Procedure Added . . . . .                              | 18   |
| Advance Census Reports. . . . .                                | 19   |
| Two-Stage Enumeration . . . . .                                | 20   |
| FOSDIC. . . . .  | 22   |
| The Listing Book. . . . .                                      | 23   |
| Quality Control . . . . .                                      | 24   |
| Self-Enumeration. . . . .                                      | 26   |
| Summary . . . . .  | 27   |
| III. INNOVATIONS IN DEFINITIONS USED AND IN DATA COLLECTED . . | 28   |
| The Old Concept Questioned. . . . .                            | 28   |
| Innovations in Definitions. . . . .                            | 29   |
| Standard Metropolitan Statistical Areas . . . . .              | 29   |
| Standard Consolidated Areas . . . . .                          | 31   |
| Urbanized Areas . . . . .                                      | 31   |
| Housing Units . . . . .  | 32   |
| Group Quarters. . . . .  | 32   |
| Innovations in Data Collected . . . . .                        | 33   |
| Age . . . . .  | 34   |
| Race. . . . .  | 34   |
| Mother Tongue . . . . .  | 35   |
| Population Mobility . . . . .                                  | 35   |
| Education . . . . .  | 36   |



## TABLE OF CONTENTS (cont'd)

| Chapter   | Page |
|---|------|
| Employment. . . . .   | 36   |
| Identification of the Housing Unit. . . . .                       | 38   |
| Other Minor Additions . . . . .                                   | 39   |
| Other Minor Modifications . . . . .                               | 39   |
| Summary . . . . .   | 42   |
| <br>IV. CONTENT ANALYSIS OF RELATED SOCIOLOGICAL LITERATURE . . . | 44   |
| The Method. . . . .   | 44   |
| The Data. . . . .   | 45   |
| The Analysis of Number. . . . .                                   | 46   |
| The American Sociological Review. . . . .                         | 46   |
| The American Journal of Sociology . . . . .                       | 49   |
| Social Forces. . . . .  | 52   |
| Comparison of the Two Decades - Number. . . . .                   | 52   |
| The Analysis of Content . . . . .                                 | 53   |
| Subjects. . . . .   | 53   |
| Number of Inhabitants . . . . .                                   | 54   |
| Population Characteristics. . . . .                               | 58   |
| Housing Characteristics . . . . .                                 | 58   |
| Urban Areas . . . . .   | 59   |
| Residence Characteristics . . . . .                               | 60   |
| Non-White Characteristics . . . . .                               | 60   |
| Summary . . . . .   | 61   |
| <br>V. THE 1960 CENSUS INNOVATIONS: CHANGE OR PROGRESS? . . .     | 62   |
| The Idea of Effectiveness . . . . .                               | 62   |
| Procedural Effectiveness. . . . .                                 | 63   |
| Extension of Sampling . . . . .                                   | 64   |
| Callback and Closeout . . . . .                                   | 64   |
| Advance Census Reports. . . . .                                   | 64   |
| Two-Stage Enumeration . . . . .                                   | 65   |
| FOSDIC. . . . .   | 65   |
| Listing Book. . . . .   | 65   |
| Quality Control . . . . .   | 66   |
| Definition and Data Effectiveness . . . . .                       | 66   |
| Standard Metropolitan Statistical Areas . . . . .                 | 67   |
| Standard Consolidated Areas . . . . .                             | 67   |
| Urbanized Areas . . . . .   | 67   |
| Housing Units . . . . .   | 67   |
| Group Quarters. . . . .   | 67   |
| Age. . . . .  | 68   |
| Race . . . . .  | 68   |

## TABLE OF CONTENTS (cont'd)

| Chapter   | Page |
|---|------|
| Mother Tongue. . . . .  | 68   |
| Population Mobility. . . . .  | 68   |
| Education. . . . .  | 68   |
| Employment . . . . .  | 68   |
| Minor Innovations. . . . .  | 69   |
| Innovations and the Content Analysis . . . . .  | 69   |
| General Conclusions. . . . .  | 69   |
| BIBLIOGRAPHY. . . . .   | 71   |
| APPENDIX. . . . .   | 80   |
| Illustration of Forms Used by the Census<br>Advance Census Report Used in Large Cities<br>Household Questionnaire Used for Sample in Large Cities<br>FOSDIC Schedule<br>Comparison of Publication Dates 1950 and 1960 Censuses<br>of Population and Housing |      |

# LIST OF TABLES

| Table  | Page |
|--|------|
| 1. General Principles of Census Taking. . . . .                                | 3    |
| 2. 1960 Census of Population - Items Enumerated . . . . .                      | 37   |
| 3. 1960 Census of Housing - Items Enumerated. . . . .                          | 40   |
| 4. Number and Percentage of Articles: - All Journals<br>1952-1956. . . . .     | 47   |
| 5. Number and Percentage of Articles: - All Journals<br>1962-1966. . . . .     | 48   |
| 6. Comparison of Census Articles to Total - All Journals<br>1952-1956. . . . . | 50   |
| 7. Comparison of Census Articles to Total - All Journals<br>1962-1966. . . . . | 51   |
| 8. Analysis of Content: Subjects . . . . .                                     | 55   |
| 9. Analysis of Content: Data Used 1952-1956. . . . .                           | 56   |
| 10. Analysis of Content: Data Used 1962-1966. . . . .                          | 57   |

## CHAPTER I

### INTRODUCTION

Man's interest in his numbers is probably as old as civilization itself. It is known definitely that statistical inquiries were carried out in Babylonia at some time during the years 4500-3800 B. C.<sup>1</sup> Census taking in modern times was begun by Sweden in 1749. However, it was the United States in 1790 and Great Britain in 1801 that first instituted practices of census taking as a part of regular governmental procedure.<sup>2</sup>

#### History and Background

The United States was the first modern nation to make a legal provision for the taking of a census at regular intervals.<sup>3</sup> The legal basis for such an enumeration is found in the Constitution of the United States, Article I, Section 2, which calls for an enumeration of the population, for purposes of apportionment "within three years after the first meeting of the Congress of the United States, and within every subsequent term of ten years."

The first United States census in 1790 was related solely to population. The enumeration was carried out under the supervision of the

---

<sup>1</sup>Hugh H. Wolfenden, Population Statistics and Their Compilation (rev. ed.; Chicago: Published for the Society of Actuaries by the University of Chicago Press, 1954), p. 6.

<sup>2</sup>Ibid., p. 7.

<sup>3</sup>Leonard Broom and Philip Selznick, Sociology (3d ed.; New York: Harper and Row, Inc., 1963), p. 308.

then 17 United States Marshals, who supervised the work of approximately 650 marshal's assistants. The returns were made by the marshals directly to the President, who turned them over to the Secretary of State, who, in turn, transmitted them directly to the printer. As no clerical force was employed to compile, verify or correct the data, the results were printed, as turned in over the signature of the marshal for each district, without explanatory texts. The items of enumeration included little more than the original request of the Constitution, which asked simply for the number of "whole" persons and a proportionate number of the slaves. The unit of enumeration<sup>1</sup> was the family. The name of the head of each household was recorded. The total number of persons in the household was classified as free or slave; the free persons as white or other; free whites as male or female; free white males as over or under sixteen years of age.<sup>2</sup>

The printed results of the first census glaringly pointed up the fact that much had been left to be desired. The compiled data represented a perfect example of lack of organization and standardization of procedure. The basic rules for attaining minimum effectiveness and uniformity for census data had been ignored. The United States census needed standard procedures to facilitate greater comparability of data, compilation of more useful facts, and greater accuracy. The basic rules shown in Table 1 represent the first steps to be considered in

---

<sup>1</sup>Unit of enumeration - the base on which the number of persons in a census is to be recorded, for example, if the unit of enumeration is the individual, the name of each person counted will be recorded.

<sup>2</sup>United States Bureau of the Census, The Story of the Census, 1790-1916, pp. 4-6.

TABLE 1

GENERAL PRINCIPLES OF CENSUS TAKING<sup>1</sup>

- 
1. To avoid misunderstanding and wrong use of terms it is necessary to recognize:
    - 1) the de facto population (the whole number present in the place where the census is taken)
    - 2) the de jure population (the number inclusive of the temporarily absent)
    - 3) the legal population (including only persons whose legal residence is in the place where the census is being taken)
  2. A general census should include the names of the population.
  3. As far as possible the census should be taken in one day, or at least reported to a fixed day, an appointed hour.
  4. The "essential" information comprises:
    - 1) names and given names; 2) sex; 3) age; 4) relationship to head of family; 5) civil or conjugal state; 6) profession or occupation; 7) religion; 8) language spoken; 9) knowledge of reading and writing; 10) origin (extraction), place of birth and nationality; 11) usual residence; 12) blindness, deafness, muteness, idiocy and mental aberrations.
- All other information is optional
5. Where the degree of popular intelligence permits and especially in large cities, age should be expressed by year and month of birth. When age is expressed in years, it should be age last birthday; for infants, in completed months.
- 

general census taking. It shows some of the basic techniques of enumeration and the preliminary clarifications which the first census needed.

---

<sup>1</sup>Wolfenden, op. cit., p. 9.

Adding to the initial realization of the need for uniformity, new problems were encountered with each succeeding United States census. Some of the problems called for changes in the enumeration process itself. Other changes were effected in the light of the significant technological advances. In the interest of continuity and efficiency, however, at this time it is feasible to consider only the more significant changes as a matter of historical note.

The first major changes in the census occurred in the nineteenth century. At the time of the 5th census in 1830, printed schedules<sup>1</sup> were first used, eliminating the problem of category improvisation by each enumerator. In 1850, a revision of enumeration methods again took place. Schedules were printed as in 1830 and 1840, but for the first time, written instructions explaining the inquiries in detail were provided and illustrated examples of prepared schedules were introduced. Information about each person was obtained instead of just the number of persons represented in each of the various classes occurring in each household. The 9th census in 1870 employed the use of maps, charts, and diagrams to present graphically the more significant facts. The census of 1880 appointed qualified supervisors to carry out the work of enumeration and increased the number and type of inquiries. Machine tabulation was introduced in 1890 by means of a Hollerith machine, originally designed and developed for census purposes by a census employee.<sup>2</sup>

---

<sup>1</sup> Schedule - a questionnaire

<sup>2</sup> United States Bureau of the Census, United States Censuses of Population and Housing: Procedural History, 1960, p. 3.

Prior to 1900, a temporary organization of the Census Bureau had been accomplished at the time of each enumeration. The increase in items burdened the decennial census, however, and called for more than the temporary organization could handle effectively with dispatch. The addition to the burdens placed on the temporary organization by the quantity of data collected made such an organization uneconomical. Thus, in 1900, the decennial census was limited to four topics; population, manufactures, agriculture and mortality. Closely following in 1902, a permanent bureau was established known as the Census Office. These two decisions shaped the census into a body of knowledge closely related to the one known today.<sup>1</sup>

The next major changes to be made in the census came with the 18th census in 1960. Several of the innovations were related to the enumeration process itself. For example, in the censuses of Population and Housing, a few days before the census date (April 1), the Post Office Department delivered an Advance Census Report (ACR) to households along postal delivery routes. This form was designed to provide for the enumerators an already prepared set of answers for certain complete count census<sup>2</sup> items.<sup>3</sup> Other methodological changes included

---

<sup>1</sup> Broom and Selznick, op. cit., p. 310.

<sup>2</sup> Complete count census (100% count) -- that phase of the 1960 censuses of Population and Housing in which specific questions are asked of persons in the United States on an individual basis; sometimes referred to as the first stage enumeration.

<sup>3</sup> Conrad Taeuber, "Taking an Inventory of 180 Million People," Population: The Vital Revolution, ed. Ronald Freedman (Garden City, New York: Anchor Books, 1964), p. 89.



two-stage enumeration, the use of the listing book, and computer editing from FOSDIC<sup>1</sup> schedule reporting cards.<sup>2</sup>

Another area in which the census made several changes was defining concepts. The defining of terms used in the schedules of the census and the understanding of these definitions occupy a major part of the census itself. The items used in the 1960 census were basically the same as those used in the 1950 census, however, there were some important changes in their definitions. Some of the new terms and concepts added or those in which the definitions were modified are as follows: Standard Metropolitan Statistical Area, group quarters, educational status, length of residence, age, Urbanized Areas, housing unit, mother tongue and persons not in the labor force who had worked at any time in the preceding ten years.<sup>3</sup>

"Few other cultures value change as does the American version of western civilization, and few have been so inclined to equate change in general with progress in particular."<sup>4</sup> The innovations in the 1960 census point out the fact that the American culture values change.

At this point, one might ask two questions: What is progress? and Are the 1960 census innovations progress? The first question may

---

<sup>1</sup> FOSDIC-Film Optical Sensing Device for Input to Computers.

<sup>2</sup> United States Bureau of the Census, Eighteenth Census of the United States: 1960. Population, I, ix-x.

<sup>3</sup> United States Bureau of the Census, Procedural History, pp. 9-13.

<sup>4</sup> Broom and Selznick, op. cit., p. 80.

be answered rather succinctly. The second definition found in Brittanica World Language Dictionary is as follows: "advancement toward maturity or completion, as of mankind or civilization; improvement."<sup>1</sup> The writer chooses to draw attention to the term "improvement" as most significant. By personal definition, change may be said to be progress, if and only if, there is improvement in some existing condition. The second question is more difficult to answer.

The major goals of the 1960 censuses were to improve the quality of the statistics, to reduce the time between the taking of the census and the publication of the results and to achieve the needed results at relatively low cost per person and housing unit enumerated.<sup>2</sup> The Census Bureau was concerned with developing approaches that showed promise of providing additional gains for future censuses. To answer the question relevant to the value of the 1960 census innovations as progress would, therefore, be premature at this point. It would be advisable only to state a preliminary answer in the form of a problem and a hypothesis.

Statement of the Problem.--What innovations in enumeration procedures, definitions used and data collected were introduced in the 1960 censuses of Population and Housing, and what is the value of the resultant enumeration to sociological research? May these innovations be seen as progress? The analysis of such a problem would include the

---

<sup>1</sup> Charles E. Funk, ed. Brittanica World Language Dictionary (New York: Funk and Wagnalls Co., 1954), II, 1046.

<sup>2</sup> United States Bureau of the Census, Procedural History, p. 5.

following inquiries:

- 1) What was the basis for the inclusion of each new item or procedure?
- 2) How does the sociological research which used census data in 1960 compare with the sociological research which used 1950 census data?
- 3) May the total result be defined as progress under the above definition?

Hypothesis.--It is hypothesized that the 1960 censuses of Population and Housing introduced certain innovations in enumeration procedure, definitions used and data collected which increased the quantity and variety of sociological research in the area of articles using census data; these changes may be defined as progress.

Each new item or procedure was designed to either save time, improve clarity or increase accuracy and thus may be seen as improvement or progress. Because of the new procedures and definitions, the quantity and variety of sociological research resulting from the 1960 census is greater than the quantity and variety of sociological research resulting from the 1950 census. The total result may be defined as progress.

Purpose of the Study.--It is the writer's aim to bring together a body of related knowledge from many and varied sources which would be of value to students of population and demography.

Scope of the Study.--This study is not designed to be an analysis of all of the areas of study carried out by the Bureau of the Census throughout a decade. It is designed to cover the following areas only:

- 1) The new and modified enumeration procedures of the 1960 censuses of Population and Housing as compared with similar procedures used in the 1950 censuses of Population and Housing.

- 2) The modifications in definitions and new data collected in the 1960 censuses of Population and Housing as compared with 1950 definitions and data.
- 3) Sociological research using census data from the 1960 censuses as compared with sociological research using 1950 census data.

Methodology.--This work is accomplished in three basic parts. The first section deals with the 1960 innovations. Data on these innovations were collected from the 1960 censuses of Population and Housing, from the 1950 censuses of Population and Housing, from the related Census Bureau working and technical papers and from books and authorities on United States demography. Each new item or procedure was analyzed in terms of the basis for its inclusion in the 1960 censuses. Each new item or procedure was compared with a corresponding item or procedure from the 1950 censuses, where applicable.

The second section is comprised of a content analysis of related sociological research. The American Sociological Review, The American Journal of Sociology and Social Forces were analyzed for the periods 1952-1956 and 1962-1966 in an effort to determine any existing relationship between the number of articles in each period and the availability of census data for the corresponding decade. The articles were also analyzed for any relationship between their content and the availability of census data during the respective periods. It was necessary to perform the following tasks:

- 1) Analysis of the number of articles and their respective publication dates, 1952-1956.
- 2) Analysis of the number of articles and their respective publication dates, 1962-1966.
- 3) Comparison of the number of articles for the respective periods.

- 4) Analysis of the content of the articles and the type of census data used, 1952-1956.
- 5) Analysis of the content of the articles and the type of census data used, 1962-1966.
- 6) Comparison of the content of the articles for the two periods.

This analysis was designed to show any increase in the earlier publication of articles using census data in the 1960 period over the 1950 period, expressing progress in the area of earlier availability of census data and value to the sociologist. The analysis of the content of the articles and the type of census data used were designed to show any relationship between the type of subjects studied (and the type of census data used) and the refinement of data collected in the 1960 censuses under the new and modified definitions and types of data collected. It was expected that the data gathered in this section would provide answers as to whether or not the innovations in the 1960 censuses were of definite value to the sociologist in the area of sociological research.

The third section summarizes both the data on the innovations and on the sociological research. The innovations in enumeration procedures are analyzed separately from the innovations in definitions used and data collected. Each item or procedure is evaluated as either change -- no improvement over the previous item or procedure; or progress -- improvement over the previous item or procedure. Improvement in procedures is judged on the basis of two criteria, time saved and cost lessened. Increased clarity of representation as evidenced by the desirability of the results of the data enumerated is the criterion for improvement in the definitions used and data collected. These judgments on progress concern mostly the improvement over previous census procedures and

results and thus concern largely the workings of the Bureau of the Census.

The summary of the section on the sociological research contains a similar analysis of the data collected. The resultant data are used to evaluate the census innovations as change or progress in a manner similar to the above. A resultant set of data of more articles dealing exclusively with census data and census related questions in the 1960 period than in the 1950 period is used as the criterion for progress. Improvement or progress herein adjudged concerns not only the work of the census, but also the entire field of sociology as it is related to sociological research.

## CHAPTER II

### INNOVATIONS IN ENUMERATION PROCEDURES

Immediately after the 1950 censuses of Population and Housing had been taken, planning for the 1960 censuses was begun. In order to reach a more acceptable end result in 1960, the Census Bureau found it necessary to review the weak points of the specific data previously gathered, to develop approaches which showed promise of providing additional gains in future censuses to attempt to improve the quality of the data collected and to improve the timeliness of the publication of the results. In an attempt to accomplish these ends, several advisory committees of census-minded private citizens were formed on a non-remunerative basis,<sup>1</sup> while the Bureau itself worked on these problems in the course of its normal procedure.

#### The Pre-Enumeration Process

As previously stated, the major goals incorporated into the planning of the 1960 censuses were improvement in the quality of the statistics, reduction of time between the enumeration and the publication of results and the achievement of results at relatively low cost per person and housing unit enumerated. After careful studies the Bureau decided that its purpose could best be accomplished through four avenues of opportunity:

---

<sup>1</sup>For a listing of these committees see United States Bureau of the Census, United States Censuses of Population and Housing, 1960: Procedural History, Appendix C.

- 1) studies of the 1950 census methods.
- 2) the use of electronic data processing equipment.
- 3) a greater use of sampling techniques.
- 4) the use of the rising level of education of the American population.<sup>1</sup>

Looking at each of these briefly, the work accomplished under the 1950 methods provided a guide for future designs. By studying these methods, their errors, miscalculations and strong points, the Bureau could arrive at ideas for improved procedures which could be applied to future censuses. At the same time, technological advances in the area of high speed, electronic data processing were being made which could more easily implement tentative ideas. The introduction of such equipment into feasible use made it possible for the Bureau to process more data at greater speed and with a reduction in error.

Further use of the techniques of sampling promised a greater range in terms of types of inquiries made while at the same time reducing manpower and performance time needed to accomplish the tasks of enumeration. Finally, with the American population, as a whole, rising in terms of level of education achieved during the previous decade, it seemed possible to extend the participation in the census taking process to the lay person through the use of self-enumeration techniques in certain complete count census items. With this procedure the Bureau hoped to increase the accuracy of specific information such as race and age.

As the Bureau perfected its ideas as to how the 1960 census should

---

<sup>1</sup>United States Bureau of the Census, Procedural History, p. 5.



be enumerated, another type of check on the system was being performed. Extensive testing of alternate census procedures had been carried out by the 1950 census operations. Following through with new procedures for 1960, from March, 1957, through the fall of 1958, several formal protests of both population and housing procedures were carried out in Yonkers, New York; Philadelphia, Pennsylvania; Memphis, Tennessee; Lynchburg, Virginia; Dallas, Texas; and Martinsburg, West Virginia. In February, 1959, the actual planned procedures for the 1960 census were tried out in the state of North Carolina.

Each pretest was conducted in connection with a special census undertaken by the Bureau at the request and expense of the enumerated city, with supplemental costs paid for by the Bureau. Each pretest required preparation before the field enumeration, printed schedules, manuals and training materials, enumerators, time and cost records and a summary and analysis of the results.<sup>1</sup> The pretests, the studies and the formation of the goals for 1960 formed the focal point from which the procedural innovations found their origin. Let us look at them now in detail.

#### Changes in Procedure

In the process of improving procedures and designs for the collection of data, one of the first areas of consideration was that of modification of previous methods. Quite often it was found that a few simple changes in the existing procedures were sufficient in the

---

<sup>1</sup>United States Bureau of the Census, Procedural History, pp. 13-14.

production of a superior product. In 1960 after a careful study, it was found that modification in two basic areas of the enumeration process produced results of a more effective nature.

Extension of Sampling.--In the 1950 censuses, the unit of enumeration and sampling was the individual. The sample (a small portion of the population intended to show the style of the entire population) was designed to include every fifth person in the United States, regardless of his living arrangement.<sup>1</sup> With this design, representation in the sample population depended on the number in each household. Large households were often represented more than one time in the sample, while small households often had no representation at all; for example, a family of two could be excluded easily from the sample should they happen to be persons one through four in the total count, while a family of ten to fourteen would probably be represented twice in the sample. In order to gain a more random sample of households while maintaining accuracy and statistical quality, the 1960 censuses incorporated the use of the total housing unit as the sample unit.

As we have noted, in 1960, the sample unit was the housing unit and all of its occupants. At the time of the enumeration, the census taker or enumerator assigned a key letter (A, B, C, or D) when he first visited the unit, regardless as to whether or not the interview was completed. The order of canvassing was predetermined by a random key letter (arrived at from the last two digits of the enumeration district number) which was assigned to the first house to be visited.<sup>2</sup> To each housing

---

<sup>1</sup>United States Bureau of the Census, The Post-Enumeration Survey: 1950, p. 12.

<sup>2</sup>United States Bureau of the Census, Procedural History, pp. 17-24.

unit given the letter "A," the designation "sample unit" was assigned. Thus every fourth household was included in the sample design creating a twenty-five percent sample of all of the housing units for the 1960 data.

The use of the entire household maintained the variability gained in the previous census and also provided for a more accurate method of achieving a random sample. The sampling process was also broadened to include several new items which previously had been a part of the complete count census. Among these items were: place of birth, detailed relationship to head of household, labor force status, occupation, industry and class of worker. These items, likewise, were deleted from the complete count inventory.<sup>1</sup>

Callback and Closeout.--The second area of modification of 1950 census procedures involved changing the callback and closeout procedures used by the enumerators. When the first visit to households in his district was made, it was an expected likelihood that several persons in the district would be away from the home temporarily, working, shopping and visiting. The 1950 enumerator had been instructed to make "several" attempts to obtain the necessary information from the respondent directly. If these attempts proved unsuccessful, then his instructions stated that he should obtain the information from the best sources available and through the use of an Individual Census Report<sup>2</sup> (ICR), if

---

<sup>1</sup>United States Bureau of the Census, United States Censuses of Population and Housing, 1960: Enumeration Time and Cost Study, pp. 169-173.

<sup>2</sup>Individual Census Report - An individual census form for each household member, left to be filled out and mailed to the Bureau by the family.

possible.<sup>1</sup> This callback and closeout procedure had long been a source of discontent for the enumerators and had also been a source of great expense to the Bureau. It was clearly necessary to define formally the exact procedures to be followed.

Thus, in 1960, the procedures were defined clearly in order to regulate the number of attempts made by the enumerator and in order to standardize the closeout procedure. The 1960 census enumerator was instructed to make only three visits to such households. After three attempts, he was instructed to gain the complete count information from neighbors, hired help or apartment managers. The enumerator then notified the householders of such activity by leaving a Notice of Enumeration Form which contained the complete count census questions. If the householder felt that incorrect information had been given, he was instructed to fill out this form and mail it in to the Bureau.<sup>2</sup>

This process was similar for sample households with a few notable exceptions. If the sample household questionnaire was not received by the Bureau, the enumerator attempted to contact the householder by telephone. When these attempts failed, the enumerator was instructed to make no more than three attempts at visitation. If he still was unable to contact the household, he was instructed to gain the complete count information from neighbors or other "qualified" persons. Certain housing information could also be gained by observation. All other sample

---

<sup>1</sup>United States Bureau of the Census, The Post Enumeration Survey: 1950, pp. 22-24.

<sup>2</sup>United States Bureau of the Census, Procedural History, pp. 55-57.

information, however, was to be left blank in order that the sample data might not be incorrectly biased. A Notice of Required Information and a Household Questionnaire were left at the household and, if they were not received in the mail, one final telephone call was made before the case was closed.<sup>1</sup>

The closeout procedure refers to the final practice of obtaining information from a neighbor or other persons outside the household. An unusually large number of closeouts was guarded against by crew leader checks and unscheduled revisits by alternate enumerators.

These two areas of modification were designed primarily to save enumeration time and to lower the cost of salaries paid to individual enumerators. The extension of sampling also lowered the number of individual questions to be answered by the general public in the complete count, while maintaining the amount of information to be gathered by the Bureau at the same general level as in 1950. The Bureau found, however, that other measures were necessary to achieve a truly superior product. It is at this point that an integral part of the 1960 censuses is reached -- the incorporation of many entirely new procedures for the first time in several decades.

#### The New Procedure Added

From census to census the differences observed with respect to completeness of the enumeration are largely the result of the methodological procedures used. Where the person to person approach is used for the count the more complex the task -- the greater is the margin for human

---

<sup>1</sup>  
Ibid., pp. 57-58.

error. In accomplishing one of the aims of the 1960 censuses, it was necessary to attempt to reduce the number of functions performed at one time by each enumerator. In an effort to produce this result, six completely new procedures were incorporated into the enumeration process.

Advance Census Reports.--In 1960 for the first time in United States census history, an Advance Census Report was mailed to households on a nationwide basis. This report form was designed to provide a source of written information for the census enumerator at the time of his visit. In previous censuses all complete count information had been gathered solely from the enumerator's personal interview. With the 1960 census, however, such items as name, sex, race, age, number of persons in the household, number of families in the household, presence of running water, presence of flush toilet, presence of bathtub and shower and number of rooms in the house were placed in this report form.<sup>1</sup> The questionnaire was divided into five sections, each clearly marked and headed by instructions for its completion (See Appendix I). The householder was instructed to fill out the questionnaire and hold it for the enumerator's coming visit.

The Advance Census Report (ACR), distributed one week to ten days before the census date, was designed to involve the population as a whole. It was felt by the Bureau that the educational level of the general public would support the use of such a questionnaire and would result in greater accuracy on certain personal information such as age and race which had often previously been left to the judgment of the

---

<sup>1</sup>United States Bureau of the Census, Enumeration Time and Cost Study, pp. 164-166.

enumerator. The Bureau also felt that the receipt of the questionnaire before the enumerator's visit would give all residents of the household the opportunity to be represented adequately and accurately in the count; and that the ACR would provide publicity for the enumerator's coming visit.<sup>1</sup>

Two-Stage Enumeration.--As in 1950 and earlier censuses, the enumerator in 1960 held the responsibility for the door to door canvassing of the enumeration districts<sup>2</sup> assigned to him, for finding and listing all the quarters in the area and for obtaining complete listings of people living in these places.<sup>3</sup> A new procedure for the 1960 census, however, separated the collection of complete count data from the collection of the sample data.

The first stage of the enumeration started with the census date. The enumerator covered his district and collected the relatively small amount of complete count information covered in the ACR. It was his duty to transfer the completed information from the ACR to the proper data processing schedules. In households where the ACR had been ignored or only partially filled out, it was his duty to secure additional information through an interview with persons in the household.

---

<sup>1</sup>United States Bureau of the Census, Procedural History, pp. 51-52.

<sup>2</sup>Enumeration districts -- areas assigned to census enumerators for canvassing purposes, ranging in size from part of a city block to hundreds of square miles depending on population density; the total number in 1960 was 272,600.

<sup>3</sup>United States Bureau of the Census, Post-Enumeration Survey, p. 20.

The first stage enumerator also initiated the second stage enumeration by leaving a second schedule or "sample questionnaire" at households with the key letter A.<sup>1</sup>

In the second stage, the sample or household questionnaire (as it is called) asked for additional information on housing and population. In the section on housing, twenty additional questions were asked ranging from size and age of the housing unit to cost of utilities and fuel. The population section included thirty additional items, which asked of each household member questions on educational level, marital status, occupation and employment status, income and military service.<sup>2</sup> It was requested by the Bureau that this questionnaire be filled out and mailed to the census office. Included in the information requested was the time of day that the person filling out the questionnaire could best be contacted for additional information, if necessary. The second stage enumerator had the responsibility for transferring the additional information to the proper data processing schedule and for follow up activity related to the sample questionnaire.<sup>3</sup>

This two-stage enumeration was carried out in areas totalling eighty percent of the national population. It provided for more individual attention to coverage in the complete count stage and for a

---

<sup>1</sup>United States Bureau of the Census, Procedural History, p. 53.

<sup>2</sup>United States Bureau of the Census, Enumeration Time and Cost Study, pp. 169-173.

<sup>3</sup>United States Bureau of the Census, Procedural History, p. 53.



more rapid canvass. As proof of this accomplishment, one might note that approximately eighty-five percent of the 1960 enumeration had been completed by April 18, while the comparable figure for 1950 was about sixty-nine per cent.<sup>1</sup> The concentration of the total canvass into a shorter period of time reduced the number of movers who were missed altogether or counted twice, while the separation of the enumeration into two stages simplified the tasks of the enumerators of each stage and reduced the amount of human error.

FOSDIC.--The information from both ACR and Household questionnaire reports was transcribed by the appropriate enumerator onto a precoded schedule by filling in one of a series of circles. In the complete count stage the enumerator recorded the information directly on the schedule while at the household, obtaining the information either from the ACR, from the interview, or, in some cases, from observation. The sample items were transcribed onto the schedule from the questionnaires mailed, by telephone or by personal interview, if necessary.

During the month of July, 1960, the approximately 814,000 enumeration books<sup>2</sup> were sent to the census operations office in Jeffersonville, Indiana. Here the editing of incomplete or inconsistent entries was accomplished. Next, the enumeration books were microfilmed. Once this microfilming process was completed, FOSDIC's task began.

Film Optical Sensing Device for Input to Computers is a system of

---

<sup>1</sup> United States Bureau of the Census, Procedural History, p. 359.

<sup>2</sup> Enumeration book - the large book carried by the census enumerator in the complete count stage and in which all the census information was eventually transcribed.

four separate units. Unit I holds and drives the computer tape. Unit II is the control for the entire system. Unit III scans microfilm and records impulses on the computer tape. Unit IV is used to program the machine's processes. The FOSDIC output consisted of a set of uniformly patterned records for each person and each housing unit in the United States for input to the computer editing system. The data tapes from FOSDIC were fed into the computer along with a progress tape containing instructions for editing and tallying. The computer produced the final population and housing counts.<sup>1</sup>

For the 1950 censuses, a card punch system, which required about 200,000 man days and a peak of about 3,000 operators, was used to prepare the data for compiling. The microfilm FOSDIC complex accomplished the same job for the 1960 censuses in about 28,000 man days with approximately 100 operators, and for an 18.5 percent larger population.<sup>2</sup>

The Listing Book.--In addition to the regular census schedule, each enumerator carried a listing book for recording the addresses of the residences in his district. In this book, the enumerator as he canvassed the district recorded the address, name of head of household and number of persons in each household. If no one was at home, the enumerator was instructed to record this so that additional calls could be made. The procedure was designed to provide better control on callbacks when no one was found at home and to help insure that the

---

<sup>1</sup>United States Bureau of the Census, Electronic Data Processing at the Bureau of the Census: 1960, pp. 5-15.

<sup>2</sup>United States Bureau of the Census, Procedural History, p. 74.

enumerators had listed the households in the appropriate order of canvass. This, in turn, insured the designation of every fourth household in a uniform manner. The use of the listing book was expected to improve coverage, to keep bias in sample selection at a low level and to help stage-two enumerators to locate the sample household for further contact, if necessary. The procedure is entirely new and not comparable to any used in the 1950 census or earlier ones.<sup>1</sup>

Quality Control.--For the first time in 1960, the quality of the enumerators' work was controlled on two levels. First, the work of the enumerators was reviewed by crew leaders in the field. Second, quality control clerks in the District Offices inspected completed enumeration books from the field to determine whether or not the crew leader was doing an adequate job. The system did not control errors resulting from inaccurate, but consistent, information given by a respondent. It was designed to cover only errors from contradictory or inadequate information. It also did not cover information recorded incorrectly by enumerators if it could not be discovered by simple checks.

The enumeration was carried out under the supervision of crew leaders, assisted by a field reviewer. Each crew leader generally supervised from fifteen to twenty enumerators and was instructed to review the work of each enumerator within the first two days of the count. On the basis of this review, he was to decide whether the enumerator should be allowed to continue in his work as he had begun, whether he needed retraining or whether his services might be dispensed

---

<sup>1</sup> United States Bureau of the Census, Eighteenth Census of the United States: 1960. Population, Vol. I., p. IX.

with.<sup>1</sup> The crew leader was instructed to check the following areas: (1) missed housing units (from the advance list prepared by the crew leader); 2) the listing books (for minor defects such as incorrectly listed callbacks); 3) FOSDIC schedules (for omissions and poor marking); 4) the listing book as compared to the enumeration book; and 5) the number of closeout procedures used. The stage-two crew leader followed much the same procedure as above. He was also responsible, however, for checking the accuracy of the transcription of information from Household Questionnaires to FOSDIC schedules, and for checking the call-back and follow-up procedures in households which failed to return the questionnaire or where it was returned with incomplete or inconsistent information.<sup>2</sup>

The District Office control personnel reviewed samples of the work in each enumeration book for adequacy of inspection. If a crew leader's inspection was rejected, once, the crew leader was retained. If it was rejected twice, he was relieved of his duty.<sup>3</sup>

As an overall check Technical Officers were assigned to various districts to review the work of all of the control personnel. Twice weekly the Technical Officer prepared a summary of the results of the various quality control activities in his district office and submitted this report to the Regional Field Director. These methods allowed for

---

<sup>1</sup>United States Bureau of the Census, Eighteenth Census, p. IX.

<sup>2</sup>United States Bureau of the Census, Procedural History, pp. 56-58.

<sup>3</sup>Ibid., p. 57.

a concurrent program of enumeration and control over the standards and accuracy of the work.<sup>1</sup>

In previous censuses, the crew leader had the general responsibility for reviewing his enumerator's work, but in 1960 this process was standardized into a system to be strictly followed. The crew leader was supplied with the assistance of a field reviewer. It was hoped that the standardized system would lead to earlier correction of erroneous work.

Self-Enumeration.--The final procedural innovation has already been alluded to under previous subheadings. The 1960 censuses found that, in several cases, enumeration time and enumerator's salaries could be lowered by using the capabilities of the American population itself. Thus, the technique of self-reporting or self - enumeration was used to a great degree in the counting process. The use of this tool was intended to improve the accuracy of the data by allowing the respondents to give thought to their answers and by reducing the effects of different interpretations given by different enumerators. Census studies in 1950 had shown that the different means used to gain the answers to the census questions by the enumerators also had a decided effect on the way that the questions had been answered. It was believed that this kind of variability could be reduced by having the individual respondent to answer as many questions about himself as possible. Thus, in 1960, we find extensive use of the self report technique through the use of both the ACR (which provided a built in check in the enumerator's

---

<sup>1</sup> Ibid., p. 58.

visit) and of the Household Questionnaire.<sup>1</sup>

Summary.--From decade to decade, census enumerations are marked by changes in enumeration procedures. As we have noted, Western civilization, and especially the American culture, sees great value in change denoted as progress. We tend to give the impression, as a people, that old procedures are used procedures and must or at least can be improved upon for greater results. It is with this attitude that the preparation for and enumeration of the 1960 censuses was made.

History marks the presentation of census innovations from decade to decade. Evaluation and survey show how and why the innovations were incorporated. With applications from past knowledge and studies of background preparations for the 1960 censuses, one may see the reasoning and justification used by the Bureau of the Census in outlining the need for the use of different and, hopefully, improved methods. Thus, we arrive at the basic innovations in enumeration procedures used in the 1960 censuses of Population and Housing; 1) the extension of sampling; 2) standardized callback and closeout procedures; 3) the Advance Census Report; 4) a two-stage enumeration; 5) Film Optical Sensing Device for Input to Computers and FOSDIC schedules; 6) the use of the listing book; 7) standardized quality control; and, 8) the use of self-enumeration techniques for the general population. These are the innovations; the analysis of their effectiveness will be given in a later chapter.

---

<sup>1</sup>United States Bureau of the Census, Procedural History, p. 6.

## CHAPTER III

### INNOVATIONS IN DEFINITIONS USED AND IN DATA COLLECTED

The size and complexity of a nationwide operation such as a census, by its very nature, create many minute problems. It has been already established that one of the major difficulties encountered with the first census involved the fact that each enumerator used his own definitions and category schemes for the count. If the 1790 census, counting approximately 100,000 people, had such difficulties, one may imagine the problems of the eighteenth census, which dealt with approximately 180 million people.

#### The Old Concept Questioned

At this point, the reader may pose the question, "Did not the early innovations 1830-1850 solve the problems of definition and classification?" In answer to this question one must recognize the fact that contemporary usage frequently and rapidly may change the connotative meaning of a word or phrase. It is therefore necessary to adjust definitions, to redefine terms and to add or delete topics used in the census in order to keep the pace with current usage and census practices.

Each decade the Bureau of the Census spends a vast amount of time deciding what topics to study, and how to define clearly and effectively the terms used in exploring these topics. The decision in these matters is based on four criteria of selection: 1) the data are needed for public policy; 2) the data serve the general interest (a wide segment



of private industry); 3) the information can be obtained by one or two or at the most a few questions; and 4) the questions are simple, unambiguous and easily understood by both enumerators and respondents.<sup>1</sup>

It is these criteria which are of importance to this section of the study. How did the Bureau define terms for the 1960 censuses? Why were new topics or questions added? How were old items redefined to facilitate current usage and practices?

### Innovations in Definitions

Each decade census concepts are defined in terms of their particular use by the Bureau. Divisions are named and categories are chosen. It is necessary for the Bureau to define these terms for all persons concerned with the enumeration and for all persons using the resultant figures, so that each person involved may gain and/or use the data effectively. From census to census, the bulk of the definitions remains essentially the same. However, from time to time, changes in the style of life of the American population make necessary the addition of new concepts and the modification of old definitions for current usage. The 1960 innovations in definitions are presented in the sections that follow.

Standard Metropolitan Statistical Areas.--A major change in definition, the concept Standard Metropolitan Statistical Area (SMSA), is an expansion of the 1950 census concept Standard Metropolitan Area (SMA). In 1950 the SMA was devised in order to represent a wide variety

---

<sup>1</sup> United States Bureau of the Census, 1960 Censuses of Population and Housing: Procedural History, p. 8.



of statistical data, primarily in counties, not served by any previous term, uniform for all states. The SMA consisted of a county or group of counties with at least one city of 50,000 or more inhabitants.<sup>1</sup>

In 1960, this concept was expanded in order to give a better representation of metropolitan United States. The SMSA in 1960 incorporated two basic considerations: 1) the focal point is a city or cities of specified populations, constituting a central city and located in a county denoted as a central county; and 2) economic and social relationships with contiguous counties, metropolitan in character, are included so that the periphery of the specific metropolitan area can be determined and so that the SMSA can cross state lines.<sup>2</sup>

The 1960 SMSA had the following characteristics: 1) one city of 50,000 or more inhabitants; or 2) two cities having contiguous boundaries, making a single community of at least 50,000 inhabitants, the smaller of which has a population of at least 15,000 inhabitants; or 3) two or more adjacent counties, each having cities of 50,000 or more inhabitants, within twenty miles of each other (city limits to city limits), and showing evidence that they are socially and economically integrated.<sup>3</sup> In some cases the 1960 SMSA had the same boundaries as the 1950 SMA; in others, parts of the area had been added or deleted. The designation for the central city had changed in some areas also.

---

<sup>1</sup>United States Bureau of the Census, Seventeenth Census of the United States: 1950 Population, Vol. I, Part I, p. 27.

<sup>2</sup>United States Bureau of the Census, Eighteenth Census of the United States: 1960 Population, Vol. I, Part I, p. XXIV.

<sup>3</sup>Ibid., pp. XXIV-XXV.

The basic difference in definition, however, involved not the size or boundary, but the accurate representation of the true metropolis.

Standard Consolidated Areas.--In two areas of the United States, the 1960 censuses were met with a kind of city complex which did not have the degree of integration necessary for inclusion into a single SMSA, but which did have strong interrelationships that merited further study. With this idea in mind, the Bureau created a concept called Standard Consolidated Areas to include such occurrences. The term was created to further study the New York-Northeastern New Jersey and the Chicago-Northwestern Indiana complexes in 1960. The former is identical with the 1950 New York-Northeastern New Jersey SMA and the latter roughly corresponds to the 1950 Chicago SMA. It was expected that there would be a growing need for such a concept in future censuses. Data for these consolidated areas appear only in sections of the census related to the corresponding states.<sup>1</sup>

Urbanized Areas.--Essentially the same concept is defined for 1960 as for 1950, but the area is delineated according to 1960 data rather than on the basis of information gathered prior to the actual census as in 1950. This change in procedure was designed so that areas which would qualify for the classification after the 1960 count, but which did not qualify on the basis of previous data, could be included. An urbanized area in 1960 is defined as an area including at least one city of 50,000 inhabitants in 1960, as well as surrounding, closely settled, incorporated places that meet special criteria.<sup>2</sup> The concept was also

---

<sup>1</sup>Ibid., p. XXV.

<sup>2</sup>Ibid., pp. XVIII-XIX.

broadened to include: 1) towns in the New England states and townships in New Jersey and Pennsylvania; 2) counties in areas elsewhere classified as urban; and 3) enumeration districts in unincorporated areas with a population density of 1,000 or more inhabitants per square mile.

Housing Units.--In 1950, the unit of enumeration was the dwelling unit, a concept similar to 1960's housing unit, but more limited. The dwelling unit defined as: 1) a group of rooms occupied or intended for occupancy as separate living quarters, having either separate cooking equipment or a separate entrance; or 2) a single room occupied or intended for occupancy as separate quarters, if it has separate cooking equipment, or is located in a regular apartment house or constitutes the only living quarters in the structure.<sup>1</sup> In the 1960 housing unit, however, separate living quarters consisting of one room with direct access, but without cooking equipment, qualified as a housing unit whether in an apartment house, rooming house or house converted to apartment use.<sup>2</sup> Also in 1960, hotel rooms qualified as housing units if they were the usual place of residence of the person or if the person had no other usual place of residence. This change had relatively little effect on the individual count, however, it was noticeable in the census tracts. The housing unit was designed to cover all types of private living accommodations where the dwelling unit did not.

Group Quarters.--The population of military installations, convents

---

<sup>1</sup>United States Bureau of the Census, Seventeenth Census of the United States: 1950 Housing, Vol. I, Part I, p. XVI.

<sup>2</sup>United States Bureau of the Census, Eighteenth Census of the United States: 1960 Housing, Vol. I, Part I, p. XXV.

and monasteries, institutions, hospitals, nurses homes, rooming and boarding houses, residential clubs, flophouses and missions, college dormitories, fraternity and sorority houses and other quarters which did not qualify as housing units for the 1960 censuses were included in the population of the area in which they were located as group quarters. This population had been counted in previous censuses as non-dwelling unit quarters. With the change from dwelling unit to housing unit in 1960, however, it was necessary to create this new category. The population included in the category is somewhat smaller in 1960 than the proportionate population figures for 1950. This difference is accounted for by the fact that the number of persons living in the alternate category (housing units) was enlarged by its new definition.<sup>1</sup>

#### Innovations in Data Collected

While the Bureau was in the process of defining concepts, it was at the same time examining the topics explored in previous censuses and the need for refining these and/or adding new ones. Data were collected on relationship to head of household, sex, race, age, marital status and citizenship in the complete count stage of the population enumeration. The housing census collected complete count data on type of unit, access to unit, kitchen or cooking equipment, condition of housing unit, occupancy, number of rooms, running water, flush toilet, bath tub or shower, tenure and vacancy status. The total number of sample items gathered by both censuses in the second stage of the enumeration was fifty,

---

<sup>1</sup>  
Ibid., p. XXVI.

ranging from place of birth to military service of men in the population census and ranging from description of property to utilities and fuel paid in addition to rent in the housing census.<sup>1</sup>

The general topics explored in the 1960 enumerations were essentially the same ones as those explored in 1950. Several new or modified questions were asked under some of the general topics, in the light of the need for additional information and the fact that current technology had made certain 1950 luxury items commonplace in 1960. In this section of the study, the writer will discuss the innovations incorporated in the data collected.

Age.--In previous censuses the respondent was asked his age in terms of completed years. The question asked for age at last birthday. In order that the question be understood clearly by the respondent using the self enumeration technique, the question in 1960 asked the respondent for the month and year of his birth. The Bureau noted that there was a substantial rise in the number of persons reporting no information relating to age.<sup>2</sup>

Race.--In 1950 the question on race had been left primarily to the observation of the enumerator. His instructions were to verify his decision with the respondent, should there be any doubt. The question on race appeared on the Advance Census Report in 1960 as a fixed alternative question. (Is this person White, Negro, American Indian, Japanese,

---

<sup>1</sup>United States Bureau of the Census, Procedural History, pp. 9-10.

<sup>2</sup>United States Bureau of the Census, Eighteenth Census, Population, pp. XXXVIII-XLI.

Chinese, Filipino, Hawaiian, Part Hawaiian, Aleut, Eskimo, or other).

It was expected that the question stated in this form would give the Bureau more accurate data, as the exact information would be known by the respondent and not subject to the guess work of the enumerator.

The data did not show a measurable or unaccountable increase or decrease for any racial group, excepting the American Indian.<sup>1</sup>

Mother Tongue.--Data on the mother tongue of the foreign born had been obtained in previous censuses (1940 and earlier), but were deleted in the 1950 censuses. In 1960 the question, if this person was born outside the United States, What language was spoken in his home before he came to the United States? was again asked. The question was once again included in order to supplement data on country of origin and to provide information on the language facility of the American population.<sup>2</sup>

Population Mobility.--In 1960, a new question on length of residence was asked. When did the person move into this house or apartment? Respondents were asked to answer in terms of the most recent move made, even if this were from one apartment to another in the same building, or back to a previous residence. The question on previous residence was asked in terms of five years prior to the census as in 1940, rather than in terms of one year prior as in 1950. These questions were designed to better represent the extent of population mobility. As a refinement to the general topic, a question was asked of persons living in a different house in 1955 on whether the residence was inside the

---

<sup>1</sup>United States Bureau of the Census, Eighteenth Census Population, pp. XLI-XLII.

<sup>2</sup>Ibid., p. XLVI.

city limits.<sup>1</sup>

Education.--In 1960, data on the educational level of the American population were expanded. School enrollment was classified as public or private and provisions were made for persons who had attended six or more years of college or other institutions of higher learning to list this response. Information on education was recorded on persons from five to thirty-four years of age instead of five to twenty-nine years as in 1950, due to the number of persons in their early thirties now attending regular colleges and universities. This information was gathered in order to represent more fully the rising level of education, especially higher education, of the American population.<sup>2</sup>

Employment.--The employment category was broadened in 1960 to include persons not currently in the labor force who had worked at any time in the preceding decade. A new question, For whom did he work? was added to the section in order to verify the employment of the individual on the basis of a preceded list of major employers in the United States. A question on the last year worked served as a basis for editing entries of persons who reported themselves as having a job, but not at work, even though they had not worked actually in some time. These questions were designed to accurately obtain more data on the status of employment or unemployment of the general public. Also, because of interest in commuting patterns, a new question was asked on means of transportation used in getting to work<sup>3</sup> (See Table 2).

---

<sup>1</sup>United States Bureau of the Census, Eighteenth Census, Population, pp. XLVII-XLVIII.

<sup>2</sup>Ibid., pp. XLIV-LII.

<sup>3</sup>United States Bureau of the Census, Procedural History, p. 10.

TABLE 2

1960 CENSUS OF POPULATION - ITEMS ENUMERATED<sup>a</sup>

| Item Number | Subject of Question                      | First Stage | Second Stage | New | Modified | Unchanged |
|-------------|--|-------------|--------------|-----|----------|-----------|
| P2          | Name                                     | x           | -            | -   | -        | x         |
| P3          | Relationship to head of household        | x           | -            | -   | -        | x         |
| P4          | Sex                                      | x           | -            | -   | -        | x         |
| P5          | Color or race                            | x           | -            | -   | x        | -         |
| P6          | Age                                      | x           | -            | -   | x        | -         |
| P7          | Marital status                           | x           | -            | -   | -        | x         |
| P8          | Place of birth                           | -           | x            | -   | -        | x         |
| P9          | Mother tongue of the foreign born        | -           | x            | x   | -        | -         |
| P10         | Country of birth of father               | -           | x            | -   | -        | x         |
| P11         | Country of birth of mother               | -           | x            | -   | -        | x         |
| P12         | Year moved into this house               | -           | x            | x   | -        | -         |
| P13         | Residence in 1955                        | -           | x            | -   | x        | -         |
| P14,15      | Highest grade completed                  | -           | x            | -   | x        | -         |
| P16         | School attendance since February 1, 1960 | -           | x            | -   | -        | x         |
| P17         | Public or private school                 | -           | x            | x   | -        | -         |
| P18         | Marriage more than once                  | -           | x            | -   | -        | x         |
| P19         | Date of first marriage                   | -           | x            | -   | -        | x         |
| P20         | Children ever born to women ever married | -           | x            | -   | -        | x         |
| P21         | Person born before or after April, 1946  | -           | x            | -   | x        | -         |



TABLE 2 (cont'd)

| Item Number | Subject of Question                             | First Stage | Second Stage | New | Modified | Unchanged |
|-------------|---|-------------|--------------|-----|----------|-----------|
| P22-25      | Employment status including hours worked        | -           | x            | -   | -        | x         |
| P26         | Employment in last ten years                    | -           | x            | x   | -        | -         |
| P27         | Industry, occupation and class of worker        | -           | x            | -   | -        | x         |
| P28         | Place of work                                   | -           | x            | -   | -        | x         |
| P29         | Transportation to work                          | -           | x            | x   | -        | -         |
| P30,31      | Employed or not employed, in 1959; hours worked | -           | x            | -   | -        | x         |
| P32-34      | Income in 1959 - wages, self-employed, other    | -           | x            | -   | -        | x         |
| P35         | Military service - males                        | -           | x            | -   | -        | x         |

<sup>a</sup>adapted from U. S. Bureau of the Census Form 60 PH-8, Household Questionnaire.

Identification of the Housing Unit.--In the stage one enumeration, two new questions were devised in order to determine whether or not the residence of the respondent qualified as a housing unit. They were: 1) Do you have a kitchen or cooking equipment? The fixed alternative response called for the clarification of whether such equipment was used by that household alone or was shared by other household; and 2) Is access to the housing unit a) direct from the outside, b) through a common hall; c) through another unit. The first question was asked of the respondent on the Advance Census Report; the second was determined by the enumerator through observation at the time of his visit. The purpose of identifying proper housing units was necessary for the

accurate counting and designation of housing units for the sample or second stage enumeration<sup>1</sup> (See Table 3).

Other Minor Additions.--Along with the addition to topical questions in both censuses, the census of housing added several new questions for the purpose of refining the general data. In keeping with the increasing trend of ownership of modern equipment and/or the presence of modern facilities in most current housing units, questions on type of water heating fuel, ownership of clothes washing machines, clothes dryers, air conditioning units, food freezers, number of bathrooms in the unit, source of water, type of sewage disposal, access to telephone and ownership of automobiles were added to obtain more refined data on the current American standard of living. Questions on the presence of a basement, an elevator, number of bedrooms and mobility of trailers were added to provide more information on the structural characteristics of contemporary housing units. Finally, further information being desired on occupancy, questions were asked to determine whether vacant units were year round units, units for migratory workers or seasonal units.<sup>2</sup>

Other Minor Modifications.--Several items were modified slightly for the 1960 housing census by dividing or combining parts of 1950 items. The 1950 category of "tent, boat or railroad car" was combined with "house, apartment or flat" in the item on type of housing unit. For the item on condition of unit, the category "not dilapidated" was divided into "sound" and "deteriorating." The item on flush toilets was

---

<sup>1</sup> Ibid., p. 364.

<sup>2</sup> Ibid., p. 12.

TABLE 3

1960 CENSUS OF HOUSING - ITEMS ENUMERATED<sup>b</sup>

| Item Number | Subject of Question             | First Stage | Second Stage | New | Modified | Unchanged |
|-------------|---------------------------------|-------------|--------------|-----|----------|-----------|
| H2          | Address                         | x           | -            | -   | -        | x         |
| H3          | Type of unit                    | x           | -            | -   | x        | -         |
| H4          | Access to unit                  | x           | -            | x   | -        | -         |
| H5          | Kitchen or cooking equipment    | x           | -            | x   | -        | -         |
| H6          | Condition of unit               | x           | -            | -   | x        | -         |
| H7          | Occupancy status                | x           | -            | -   | x        | -         |
| H8          | Number of rooms                 | x           | -            | -   | -        | x         |
| H9          | Hot running water               | x           | -            | -   | -        | x         |
| H10         | Flush toilet                    | x           | -            | -   | x        | -         |
| H11         | Bathtub or shower               | x           | -            | -   | -        | x         |
| H12         | Owned or rented                 | x           | -            | -   | -        | x         |
| H13         | Vacancy status                  | x           | -            | -   | x        | -         |
| H14,39      | Description of property         | x           | -            | -   | x        | -         |
| H15,40      | Value of property               | x           | -            | -   | -        | x         |
| H16,41      | Amount of rent                  | x           | -            | -   | -        | x         |
| H17,18,42   | Farm residence                  | -           | x            | -   | x        | -         |
| H19         | Number of bedrooms              | -           | x            | x   | -        | -         |
| H20         | Year unit was built             | -           | x            | -   | x        | -         |
| H21         | How is unit heated              | -           | x            | -   | x        | -         |
| H22         | Heating, cooking and water fuel | -           | x            | x   | -        | -         |
| H23         | Clothes washer                  | -           | x            | x   | -        | -         |

TABLE 3 (cont'd)

| Item Number | Subject of Question           | First Stage | Second Stage | New | Modified | Un-changed |
|-------------|-------------------------------|-------------|--------------|-----|----------|------------|
| H24         | Clothes dryer                 | -           | x            | x   | -        | -          |
| H25         | Number of TV sets             | -           | x            | -   | x        | -          |
| H26         | Number of radio sets          | -           | x            | -   | x        | -          |
| H27         | Air conditioning              | -           | x            | x   | -        | -          |
| H28         | Home food freezer             | -           | x            | x   | -        | -          |
| H29         | Number of units in structure  | -           | x            | -   | -        | x          |
| H30         | Number of bathrooms           | -           | x            | x   | -        | -          |
| H31         | Source of water               | -           | x            | x   | -        | -          |
| H32         | Sewage disposal               | -           | x            | x   | -        | -          |
| H33         | Basement                      | -           | x            | x   | -        | -          |
| H34         | Elevator                      | -           | x            | x   | -        | -          |
| H35         | Availability of telephone     | -           | x            | x   | -        | -          |
| H36         | Number of automobiles         | -           | x            | x   | -        | -          |
| H37         | Mobility of trailer           | -           | x            | x   | -        | -          |
| H38         | Duration of vacancy           | -           | x            | x   | -        | -          |
| H43-46      | Utilities in addition to rent | -           | x            | -   | -        | x          |

<sup>b</sup> adapted from United States Bureau of the Census Form 60 PH-8, Household Questionnaire.

modified in two respects. The item on outside toilets was combined with the response, "no toilet for this unit" and inside flush toilets were categorized as "for exclusive use" or "shared with other units." The vacancy status item was divided into three categories of use, rented or

sold, not occupied and other vacant. The final minor modification involved the simplification of the screening question in the category description of property, in order to eliminate multi unit properties and properties with businesses on the premises from tabulations on property value. In essence these items were not changed, but refined in order to get better results from the data.<sup>1</sup>

Summary.--Each census in each decade must analyze its definitions and topics in order to attain the most use from the data collected. Items are added or deleted and definitions are modified or added so that current enumerators and respondents may understand clearly the nature of the questions asked and the types of answers requested. From decade to decade, the general design of the census remains the same in terms of topics and terminology, but modifications and refinements are necessary in order to keep pace with a changing society. The 1960 censuses of Population and Housing are no exception to this process.

The 1960 innovations discussed in this section may be divided into two categories. First, the innovations in definitions used involved the concepts of Standard Metropolitan Statistical Areas, Standard Consolidated Areas, Urbanized Areas, Housing Units and Group Quarters. Second, the 1960 censuses incorporated innovations in the data which were collected. There were no new topics, but modifications were made in the areas of age, race, mother tongue, population mobility, education, employment and identification of the housing unit. Minor additions to the general data were also made in the area of modern equipment or

---

<sup>1</sup>Ibid., p. 13.

facilities found in contemporary housing units and minor modifications were made on previous census items in order to refine the items and get better results from the data. An analysis of the effectiveness of these innovations will be made in a later chapter.

## CHAPTER IV

### CONTENT ANALYSIS OF RELATED SOCIOLOGICAL LITERATURE

In an effort to determine the value of the innovations in the 1960 censuses to sociological research, a content analysis of related literature was undertaken. Three major sociological journals were selected as the basis for the survey. They were The American Journal of Sociology, The American Sociological Review and Social Forces.

The Method.--The journals were scanned for the designated periods in three ways. First, the total number of articles appearing in a specific period (one year) was recorded. Second, the footnote, methodology and data collected sections of the articles were examined for reference to the use of Population and Housing census data. The 1952-1956 articles were examined for use of 1950 census data and the 1962-1967 articles for the use of 1960 census data. A bibliographical reference was recorded for the articles which used census data. This section of the study is referred to as the analysis of number. The third section of the survey involved reading those articles designated as using census data for a determination of the type of inquiry made and the type of census data used. This section is referred to as the analysis of content. Let us look at the findings.

A preliminary analysis of the data collected revealed several uncontrollable factors. First, a study of this kind has no control over the factors operating in the area of individual interest of the contributors to the journals. Although the availability of improved

census material could be an influencing factor in the decision of the contributors as to what type of area to study, the fact remains that the basic deciding factor is the researcher's own interest.

A second consideration centers around the fact that all of the articles which were submitted to the journals for publication did not appear. Each journal has an editorial staff which screens the articles and makes the decision as to which ones are to appear. Often the articles are rewritten from papers presented at the meetings of the various sociological societies and usually the more significant articles by the better known sociologists are given first consideration. With these factors in mind, it is logical to realize that many articles on various subjects are not published in the major journals.

Although a consideration of these factors is necessary for an understanding of the total project, they do not represent a hindrance to the study itself. The individual writer's interest is a deciding factor for the area to be studied, but it is as likely that this interest will be in areas related to census data as in any other. The decision to publish census related articles is also contingent on the sociologist's interest. If the more significant articles by the better known sociologists are census related then these are the articles which will be published. It is therefore logical to assume that there is no intended bias in most cases in terms of the articles which will be chosen to appear in the major journals which would affect the validity of a study of this nature.

The Data.--The articles appearing in each of these journals were studied for five year periods in 1950 and in 1960. The periods 1952-



1956 and 1962-1966 were chosen because it was felt that these dates, under comparison, would: 1) show any increase in the earlier publication of the 1960 articles using census data, which would express a usefulness to the sociologist resulting from earlier availability of census data; and 2) the five year interval would give ample opportunity for the study of a wide variety of subjects under study in these articles and the differences in content according to the application of a more refined volume of census data.

### The Analysis of Number

As each of the journals has a different scheme for publication, it is perhaps best to make an analysis first of each journal separately for the respective periods. There is no relationship between the findings and the order of reporting.

The American Sociological Review.--Using the procedure described above, the total number of articles using census data published in the American Sociological Review between the years 1952-1956 was two more than the number published between the years 1962-1966 (See Tables 4 and 5). Although these totals suggest little overall change in the research carried out in the respective periods, an analysis of the number of articles by year indicates a marked increase in the number of articles in 1964; this could be indicative of the fact that the bulk of the 1960 census data had been published by this date (See Appendix). The 1960 articles based on census data are represented by small numbers in the beginning of the period; but the number increases sharply to eight in 1964. There are four articles for each of the two closing years of the period (1965 and 1966). There is moderate decrease in

TABLE 4  
NUMBER AND PERCENTAGE OF ARTICLES: ALL JOURNALS 1952-1956

| Year  | All Journals | American Socio-<br>logical Review |            | American Journal<br>of Sociology |            | Social Forces |            |
|-------|--------------|-----------------------------------|------------|----------------------------------|------------|---------------|------------|
|       |              | Number                            | Percentage | Number                           | Percentage | Number        | Percentage |
| 1952  | 3            | 3                                 | 100.0      | 0                                | 0          | 0             | 0          |
| 1953  | 8            | 3                                 | 37.5       | 1                                | 12.5       | 4             | 50.0       |
| 1954  | 5            | 3                                 | 60.0       | 0                                | 0          | 2             | 40.0       |
| 1955  | 12           | 7                                 | 58.3       | 4                                | 33.3       | 1             | 8.3        |
| 1956  | 15           | 6                                 | 40.0       | 1                                | 6.7        | 8             | 53.3       |
| Total | 43           | 22                                | 51.2       | 6                                | 13.9       | 15            | 34.9       |

TABLE 5  
NUMBER AND PERCENTAGE OF ARTICLES: ALL JOURNALS 1962-1966

| Year  | All Journals | American Socio-<br>logical Review |            | American Journal<br>of Sociology |            | Social Forces |            |
|-------|--------------|-----------------------------------|------------|----------------------------------|------------|---------------|------------|
|       |              | Number                            | Percentage | Number                           | Percentage | Number        | Percentage |
| 1962  | 2            | 2                                 | 100.0      | 0                                | 0          | 0             | 0          |
| 1963  | 7            | 2                                 | 28.6       | 4                                | 57.1       | 1             | 14.3       |
| 1964  | 18           | 8                                 | 44.4       | 4                                | 22.2       | 6             | 33.3       |
| 1965  | 13           | 4                                 | 30.7       | 3                                | 23.1       | 6             | 46.2       |
| 1966  | 13           | 4                                 | 30.8       | 5                                | 38.4       | 4             | 30.8       |
| Total | 53           | 20                                | 37.7       | 16                               | 30.2       | 17            | 32.1       |

terms of the total number of articles for the period. These figures possibly indicate the fact that more writers used census material at the earlier dates after the publication of the data.

In 1950, the larger numbers are found towards the end of the period. The succeeding year after the peak increase in number (7 articles) is marked by a loss of only one article. The later availability of census material in 1950 possibly delayed the appearance of such articles that used census data. The data are not completely comparable, as the sum of the totals for all journals and the percentage figures indicate. In the 1950 period the American Sociological Review carried the greatest percentage (51.2) of the total number of articles published by a sizeable margin, while in 1960 this margin was reduced by the increase in the American Journal of Sociology from 13.9 to 30.2 percent. The American Sociological Review continued to publish the largest percent of census based articles; Social Forces showed a slight decline in its proportion.

The American Journal of Sociology.--A somewhat similar situation is found in the number analysis of the articles appearing in the American Journal of Sociology for the two periods (See Tables 4 and 5). As with the Review, the increase in the number of articles appears at an early date (1963) in the 1962-1966 period. The American Journal, unlike the Review, however, maintained a somewhat steady number of articles published per year throughout the period. A different type of occurrence may be noticed with this journal. The total number of articles published in the 1962-1966 period shows a marked increase over the total number published in the 1952-1956 period. The increase in number is not indicative of a significant increase in the overall number of articles published by the Journal for the period (See Tables 6 and 7), but seems to

TABLE 6  
COMPARISON OF CENSUS ARTICLES TO TOTAL-ALL JOURNALS 1952-1956

| Year  | Total Articles<br>All Journals | American Socio-<br>logical Review | American Journal<br>of Sociology | Social<br>Forces | Total Census<br>All Journals | Percentage Total<br>Census Data |
|-------|--------------------------------|-----------------------------------|----------------------------------|------------------|------------------------------|---------------------------------|
| 1952  | 178                            | 91                                | 38                               | 49               | 3                            | 1.68                            |
| 1953  | 162                            | 77                                | 40                               | 45               | 8                            | 4.93                            |
| 1954  | 174                            | 86                                | 39                               | 49               | 5                            | 2.87                            |
| 1955  | 161                            | 68                                | 42                               | 51               | 12                           | 7.45                            |
| 1956  | 175                            | 83                                | 39                               | 53               | 15                           | 8.57                            |
| Total | 850                            | 405                               | 198                              | 267              | 43                           |                                 |

TABLE 7  
COMPARISON OF CENSUS ARTICLES TO TOTAL-ALL JOURNALS 1962-1966

| Year  | Total Articles<br>All Journals | American Socio-<br>logical Review | American Journal<br>of Sociology | Social<br>Forces | Total Census<br>All Journals | Percentage Total<br>Census Data |
|-------|--------------------------------|-----------------------------------|----------------------------------|------------------|------------------------------|---------------------------------|
| 1962  | 156                            | 70                                | 40                               | 46               | 2                            | 1.28                            |
| 1963  | 155                            | 67                                | 42                               | 46               | 7                            | 4.51                            |
| 1964  | 141                            | 47                                | 41                               | 53               | 18                           | 12.76                           |
| 1965  | 146                            | 56                                | 36                               | 54               | 13                           | 9.11                            |
| 1966  | 152                            | 61                                | 40                               | 51               | 13                           | 8.55                            |
| Total | 750                            | 301                               | 199                              | 250              | 53                           |                                 |

indicate the fact that other factors are in operation. In the absence of evidence to the contrary, this increase may be equated with the availability of more refined and more readily available census data.

Social Forces.--The patterns exhibited by Social Forces in the early stages of the two periods is somewhat different than that found in the other two journals (See Tables 4 and 5). Four articles were published in the second year of the 1952-1956 period while only one article appeared for the same period in 1962-1966. The increase in the number of articles for the 1960 period begins with the third year. Here the pattern of the other two journals for the 1960 period is approximated. There is an increase to six articles and a rather steady maintenance of number throughout the period. The evidence in this case is somewhat inconclusive, however.

#### Comparison of the Two Decades - Number

The total number of articles published in the three journals for the period 1952-1956 (850) is exactly one hundred more than the total number (750) published in the 1962-1966 period (See Tables 6 and 7). At the same time, the number of articles published (53) which used census data increased in the 1962-1966 period by ten over the 1952-1956 period (43). The greatest number of articles for the 1960 period occurred in 1964, the middle of the period, while for the 1950 period the greatest number was reached in 1956, the end of the period; the percentage of the total number of articles published based on census data in the 1964 period (12.76) is far in excess of the highest percentage (8.57) in 1956. The former occurs early in the period and the latter occurs at

the end of the period.

The numerical and percentage figures seem to show some measurable difference between the two sets of data. In order to test the significance of difference between the total figures, however, two tests for variance were made. An "F" ratio test of variance between and within sets and Fisher's "t" ratio for samples of equal size were performed on the data. Neither the F ratio of .316 nor the t of .26 was significant at the .01 or .05 percent levels. These tests would then indicate that the significance of difference between the two sets of data is negligible. The within sets variance in the F ratio proved to be quite large. The figure was 31.3 as compared with the between sets variance of 10.0. This figure suggests the already recognized difference of the earlier dates of appearance in number of articles in the 1962-1966 period. Perhaps a reanalysis of the data with a larger sample at the end of the decade would improve the quality of the data and make the findings more definite.

#### The Analysis of Content

Each article using census data for each of the respective periods was again analyzed in order to determine any difference in the types of inquiries made. The analysis was carried out on two levels. First the data were analyzed and arranged according to the subjects studied in the articles. The second analysis concerned the type or category of census data used in the article.

Subjects.--In the 96 articles which used census data a wide variety of topics was found ranging from fertility to professionalism.



The 1952-1956 period displayed a wide range of interests centering heavily in the area of occupations, urbanism and population change. In the 1962-1966 period, the emphasis shifted to the nonwhite population and migration, although there remained a large number of articles on occupation. Many of the subject categories listed in Table 8 were covered simultaneously in one article. In order to make a classification of the data for the analysis, however, the most important topic or the category most heavily dealt with in the article was chosen as its subject. The subjects of the articles used in 1962-1966 gave no indication that the 1960 census innovations affected the subjects undertaken for study during the period. The minor differences in subject categories would be more likely a result of social change and the interest in social change in the 1960's.

Although the subject headings do not indicate any great influence from the 1960 census innovations, it is perhaps illogical to assume that such an analysis would. A further study of content, by census data used, was therefore undertaken in an effort to prove a positive relationship.

Table 9 describes the content of the articles from the three journals according to six categories of census data used. These categories were originated in an effort to combine and condense the many types of census data available after the decennial count and in an effort to represent fully any noticeable trends. Let us examine each category individually.

Number of Inhabitants.--According to the original purpose of the United States Census, the category, Number of Inhabitants, refers to

TABLE 8

## ANALYSIS OF CONTENT: SUBJECTS

| Subject           | 1952-1956 | 1962-1966 |
|-------------------|-----------|-----------|
| Census            | 3         | 1         |
| Education         | 3         | 4         |
| Family            | 5         | 3         |
| Migration         | 2         | 8         |
| Non-Whites        | 3         | 11        |
| Class and Status  | 3         | 7         |
| Suburbia          | 4         | 2         |
| Population Change | 5         | 3         |
| Urbanism          | 5         | 4         |
| Work              | 9         | 7         |
| Structure         | 1         | 3         |
| Total             | 43        | 53        |

the actual number of persons living in the United States. This category is represented in census data by a full volume of data with parts for each state and other small areas counted by the Bureau of the Census. It is from this volume that figures for the total number of inhabitants for specific places are found.

In the analysis, this category proved to be a standard source of data for the 1952-1956 period, representing the second highest number among the sources. In the 1962-1966 period, however, this category

TABLE 9  
ANALYSIS OF CONTENT: DATA USED 1952-1956

| Year  | Residence | Housing | Number of<br>Inhabitants | Population | Urban | Non-White |
|-------|-----------|---------|--------------------------|------------|-------|-----------|
| 1952  | 0         | 0       | 2                        | 1          | 0     | 0         |
| 1953  | 1         | 1       | 4                        | 1          | 0     | 1         |
| 1954  | 2         | 1       | 2                        | 1          | 0     | 1         |
| 1955  | 0         | 0       | 0                        | 9          | 2     | 1         |
| 1956  | 0         | 0       | 2                        | 5          | 3     | 3         |
| Total | 3         | 2       | 10                       | 17         | 5     | 6         |

TABLE 10  
ANALYSIS OF CONTENT: DATA USED 1962-1966

| Year  | Residence | Housing | Number of<br>Inhabitants | Population | Urban | Non-White |
|-------|-----------|---------|--------------------------|------------|-------|-----------|
| 1962  | 0         | 0       | 0                        | 2          | 0     | 0         |
| 1963  | 0         | 0       | 3                        | 2          | 2     | 0         |
| 1964  | 3         | 0       | 1                        | 6          | 4     | 4         |
| 1965  | 2         | 0       | 0                        | 5          | 3     | 3         |
| 1966  | 1         | 0       | 3                        | 6          | 1     | 2         |
| Total | 6         | 0       | 7                        | 21         | 10    | 9         |

dropped to fourth place. Except for the fact that the self-reporting technique accounted for some discrepancy in the numbers reported in the 1960 censuses, census innovations had little effect on the use of this category of data. The articles in this category generally used the data to describe the population or a sample of the population in terms of actual number.

Population Characteristics.--An entire volume of census data is reserved for the reporting of the characteristics of the population. Such items as age, sex, race, education, residence, occupation and income are among the characteristics reported on in this volume. The category, as it is represented in the table, refers to the type of characteristics listed above with the exception of the non-white population characteristics and data on residence; these were made separate categories and will be discussed below (See Tables 9 and 10).

Because of the inclusiveness and extensive nature of the category, it was, both in 1952-1956 and 1962-1966, the most popular source of data with sixteen and twenty articles, respectively. Most of the articles on occupation, socio-economic status, social structure and the family fall into this category. There is a slight increase in the number of articles in this category for the 1962-1966 period. Because of the extensiveness of the category, it would be unwise to equate so small an increase to any particular area or innovation. Through an analysis of the subject category, the increase seems to be located in the socio-economic status category, but even this knowledge is not enough to propose directly a relationship with the increase and census innovations.

Housing Characteristics.--This category covers essentially the

same types of data as population characteristics, but the emphasis is placed on housing items such as type of structure, presence of bathing facilities, type of cooking equipment and value of housing unit. The category in the analysis represents articles which used the value of the residence as a criterion for socio-economic status, especially where the place of residence was equated to some other variable such as college plans. The category has only a small representation in the 1952-1956 period and no representation in the 1962-1966 period. Such data are found to be generally useful in other branches of the social sciences more than in the types of inquiries found in these journals. This does indicate to the writer, however, that the housing census innovations did not appear to have an effect on the sociological research of the period (See Tables 9 and 10).

Urban Areas.--The category, urban areas, was created to serve the interest of securing data occurring under other major categories, but specifically compiled again under the categories dealing with Urbanized, Urban Fringe and Standard Metropolitan Statistical Areas. Routine and special information concerning these areas is depicted by the census. The Bureau of the Census modified the definition of Urbanized Areas and created the Standard Metropolitan Statistical Area (SMSA) for the 1960 censuses. This category was created to show any increase gained in content of articles over the corresponding 1950 terms. The 1952-1956 category reflects the 1950 definition of Urbanized Areas and the 1950 Standard Metropolitan Area (See Tables 9 and 10).

There is an increase by five in the number of articles in the 1962-1966 period over the preceding period. In content, this increase

reflects more nearly a greater use of the SMSA as an area for study. The SMSA, more clearly depicting the character of a metropolis than the SMA, was used widely both as a basis for study and for population figures for large areas. Urbanized areas frequently were mentioned in the articles as being used to greater advantage by the authors of the 1962-1966 articles under the refined 1960 definition.

Residence Characteristics.--Generally, a part of population characteristics, residence was devised as a separate category because of the trend towards greater use in the articles and because it reflects a census innovation intended for such a purpose. The modification of the question on length of residence in the 1960 census of Population was designed to refine the data collected on the migration trends of the population. In the 1952-1956 period, three articles were written which used length of residence data from the 1950 definition. In the 1962-1966 period, this number was doubled and census data were more exclusively used in the articles. Here again we find an indication that the 1960 census innovations could have added to the content of sociological research (See Tables 9 and 10).

Non-White Characteristics.--The Bureau of the Census devotes a complete section of its Characteristics of the Population to a breakdown of these characteristics for the non-white population. This category includes all non-white groups, but on a general basis may be said to reflect the Negro population more than any other.<sup>1</sup> Non-white studies rose in the 1962-1966 period from six to nine articles. This increase

---

<sup>1</sup> The Non white population of the United States is approximately 93 percent Negro according to census figures.

is due probably to an increase in the study of the problems of the Negro in the 1960's amidst the racial strife rather than to census innovation (See Tables 9 and 10).

Summary.--The analysis of related sociological literature was designed to prove a positive relationship between the 1960 census innovations (as progress) and the value of this progress to sociological research and the sociologist. According to the original hypothesis, the earlier publication dates of 1960 census results and the innovations in the census definitions and data collected should prove their value to sociological research by showing an increase in the total number and earlier publication of articles using census data in sociological journals. The content of these articles should also have resulted in a wider variety of studies and in an application of the newly defined census concepts and the refinement of the data collected.

An analysis of the number and the content of articles appearing in the American Sociological Review, the American Journal of Sociology and Social Forces shows no measurably significant increase in the articles appearing in these journals during the 1962-1966 period over the 1952-1956 period. There are minor indications in the analyses that the census innovations had some effect on the articles published in the 1962-1966 period, but these indications must, on the basis of the lack of conclusive positive evidence, be construed as limited.



## CHAPTER V

### THE 1960 CENSUS INNOVATIONS: CHANGE OR PROGRESS?

One of the original questions in the problem under study in this work refers to the idea of the 1960 census innovations as actual progress over previous census procedures. Progress, in the study, refers to an improvement over a previous condition while change refers to modification with no improvement. According to predefined criteria in this section of the study, the writer examines the effectiveness of the 1960 census innovations in an effort to determine whether or not they may be seen as progress.

Before the actual analysis is undertaken, it is necessary to further clarify the purpose of the section. It is recognized that progress should be analyzed in terms of the persons or groups which would benefit from the total result. The Bureau of the Census is concerned primarily with progress in areas which involve the production of a cheaper, but superior volume of data. The sociologist, on the other hand, is concerned generally with progress as it involves more accessible, more usable and more comparable data which may be applied in research studies. It was with these two factors in mind that the data were analyzed for effectiveness and progress.

#### The Idea of Effectiveness

Analysis reveals that the effectiveness of the 1960 census innovations on an individual basis is more directly applicable to the concerns

of the Bureau of the Census. On the other hand, the effectiveness of the total effort is more readily applicable to the concerns of the sociologist, especially in the area of sociological research. Therefore, it was necessary to analyze the effectiveness of the 1960 census innovations in three separate areas and with separate criteria for each area relating to the data and to the group which benefited from the results -- the Bureau of the Census on an individual basis and the sociologist in terms of total effort. These separate summaries and analyses follow.

#### Procedural Effectiveness

It was expected by the Bureau of the Census that each of the 1960 innovations in enumeration procedures would effect a measurable improvement in the time needed to complete the census process. These innovations were designed primarily to save time or lessen cost. It is therefore these two factors which are used as criteria of progress. The overall effectiveness of these innovations falls short of the desired result quite decisively. The Bureau states in its post-censal analysis that because of the necessity for rechecks, and in some cases re-enumerations, the actual enumeration time ran longer than expected by at least two months. This increase in time directly increased the cost of the total enumeration and proportionately increased employee expenses and local office costs substantially over the budget estimates and amounts appropriated.<sup>1</sup> The one area of the enumeration which did not suffer

---

1

United States Bureau of the Census, United States Censuses of Population and Housing. Procedural History, 1960, pp. 63-64.

increases in time and cost was that of data processing; this area was influenced by only one innovation (FOSDIC). Generally, the innovations in enumeration procedures either showed no improvement over the previous conditions in terms of the criteria or they showed a negative effect. A brief analysis follows.

Extension of Sampling.--This innovation, which was in essence a modification, is one of the few areas in which at least some results may be seen. The time spent in coding work for census items was cut by 75 percent over the 1950 time by increasing the size of the sample.<sup>1</sup> The cost of sampling rose proportionately with the increase in sample size, however. The time spent in sampling is not relevant to this innovation, but comes under the topic two-stage enumeration. The total effort may be defined as change, however, for the time saved is offset by an increase in cost.

Callback and Closeout.--The standardization of these processes saved both time and money for the Bureau of the Census. The saving was accomplished in the area of reducing unnecessary work which added to the time and salaries of the enumerators. This innovation was a minor one although defined as progress, it does not add reasonably much weight to the overall effort in either a positive or negative manner.

Advance Census Reports.--An analysis of the effectiveness of the advance census reports performed by the Bureau of the Census with a sample of 250 enumerators found that 59 percent of all ACR's had been filled out completely at the time of the enumerator's first visit.<sup>2</sup> A

---

<sup>1</sup>Ibid., p. 7.

<sup>2</sup>Ibid., p. 55.

substantial amount of completion and correction work still had to be performed by the enumerator. As this was a new procedure, it represented a new cost to the Bureau. The overall effectiveness of the ACR is evaluated as negative change.

Two-Stage Enumeration.--With all of the difficulties encountered in the enumeration process, an initial analysis of the two-stage enumeration process leads one to the conclusion that herein lay the root of the problem. Evidence to the contrary shows that this innovation was successful. Other problems in the enumeration related to the complexity of the total number of innovations slowed down the process, but this innovation when viewed outside the complex was seen as a success. Increases in cost and time were shown to be unrelated to the two-stage process.<sup>1</sup> The overall effectiveness of this innovation is defined as progress; it accomplished its purpose.

FOSDIC.--A singularly successful innovation, the use of the FOSDIC system may be defined as progress. This procedure reduced the time necessary to perform the same task in 1950 by 172,000 man hours and 2,900 workers.<sup>2</sup> The procedure reduced the cost of the operation by approximately seven million dollars over the 1950 cost.<sup>3</sup>

Listing Book.--Designed to work in cooperation with other necessary procedures, the use of the listing book proved to be a minor innovation of minor consequences. It saved neither time nor costs. Thus, it is

---

<sup>1</sup>Ibid., p. 57.

<sup>2</sup>Ibid., p. 74.

<sup>3</sup>Ibid., pp. 91-93.

defined as positive change.<sup>1</sup>

Quality Control.--This procedure proved to be effective in the control of time lost and salaries spent for ineffective work. Although this system pointed up many inefficiencies which resulted in an increase in time and cost for rechecks and re-enumerations, it accomplished the purpose for which it was designed; it is, thus, defined as progress.<sup>2</sup>

#### Definition and Data Effectiveness

The innovations in definitions used and data collected were designed to make the collection of data and reporting of facts more easily understood by both persons connected with the enumeration and by persons subsequently using the data. Increased clarity of representation as evidenced by the desirability of the results of the data enumerated is the criterion for progress in this section. An overall analysis of these innovations reveals that both the innovations in definitions used and in data collected achieved a generally favorable end result. One may therefore define these innovations as progress when speaking of the total effort. Although definitions and topics occupy a major portion of the census, the 1960 innovations in this area did not produce a major change in the census itself. These innovations would more directly affect the sociologist than the procedural innovations. However, the refinement of data was expected to have a positive effect on the content of the sociological literature for the 1960 period. An

---

<sup>1</sup>Ibid., p. 8.

<sup>2</sup>Ibid., pp. 56-58.

analysis of each item follows.

Standard Metropolitan Statistical Areas.--This new concept increased the clarity of data on the metropolis. It outlined more clearly the characteristics of modern metropolitan areas and certain urban fringe areas surrounding them. It may be defined as progress.<sup>1</sup>

Standard Consolidated Areas.--An entirely new area is defined here. This concept increased the clarity of the data on contiguous cities which were not metropolitan by the 1960 census definition, but which studied as a unit were metropolitan in character. It may be defined as progress.<sup>2</sup>

Urbanized Areas.--This concept was modified under the 1960 definition to include areas which would, at the time of the enumeration for the first time, meet the prescribed qualifications. It is defined as change rather than progress; for, clarity here is not increased.

Housing Units.--With this concept, clarity is increased in the area of determining exactly what type of living quarters could be designated for the sample design. It may be defined as progress.<sup>3</sup>

Group Quarters.--This is a miscellaneous category, not especially clearer in definition, but necessitated by the definition of the housing unit. It is defined as change.<sup>4</sup>

<sup>1</sup>United States Bureau of the Census, Eighteenth Census of the United States: 1960. Population, Vol. I, Part I, p. 24.

<sup>2</sup>Ibid., p. 25.

<sup>3</sup>United States Bureau of the Census, Eighteenth Census of the United States: 1960. Housing, Vol. I, Part I, p. 16.

<sup>4</sup>United States Bureau of the Census, Eighteenth Census of the United States: 1960. Population, p. 41.

Age.--The modification in this topic was designed to aid the respondent in clearly answering the question under the self enumeration techniques. Those respondents who used the technique seemingly benefited from the innovation, but the Bureau noted a substantial rise in the number of persons reporting no information in this category. Otherwise, the category itself remained unchanged. This innovation is defined as change.<sup>1</sup>

Race.--Here again is a modification made for self-reporting. The Bureau noted no measurable increase or decrease in reporting for most racial groups. This innovation is defined as change.<sup>2</sup>

Mother Tongue.--This topic included a question for refining data on language facility. It increased the clarity of the data in this area. It may be defined as progress.<sup>3</sup>

Population Mobility.--The place of residence modification clarified the topic of population mobility over a greater range of time. It would be defined as progress.

Education.--The topic on education was modified to increase the clarity of data for a wider range of age groups and for higher education. This innovation would be defined as progress.<sup>4</sup>

Employment.--The data here were clarified to describe more accurately

<sup>1</sup> Ibid., p. 42.

<sup>2</sup> Ibid., p. 46.

<sup>3</sup> Ibid., p.

<sup>4</sup> Ibid., p. 28.

the nature of unemployment in the United States. This innovation would be defined as progress.<sup>1</sup>

Minor Innovations.--All of the questions added to refine the data on facilities, equipment and occupancy added to the clarity of the statistics on the standard of living of the population. These innovations would be defined as progress.

#### Innovations and the Content Analysis

The analysis of related sociological literature was expected to prove that the 1960 census innovations had a positive effect on the number and content of articles found in the major sociological journals during the 1962-1966 period. It was expected that earlier publication of census data resulting from the census innovations would produce or spur an earlier production and a greater volume of census related articles dealing more thoroughly with census data than that found in the 1952-1956 period. The analysis of the number of such articles found in the American Sociological Review, The American Journal of Sociology, and Social Forces revealed no measurable increase in the number of articles for the 1960 period. The analysis of content showed no application of census data which was affected directly by the innovations.

General Conclusions.--The findings in this study may be summarized succinctly with a review of the original hypothesis. The hypothesis stated that the 1960 censuses of Population and Housing introduced certain innovations designed to save time, improve clarity, increase accuracy and to increase the quantity and improve the content of sociological

---

<sup>1</sup>Ibid., p. 52.



research in articles using census data. It further stated that the total result of the innovations could be defined as progress. The study, however, has disproved the hypothesis.

The 1960 censuses of Population and Housing did introduce several innovations in enumeration procedures, definitions used and data collected. The innovations in enumeration procedures must be defined as change. These innovations for the most part did not save time or cost and in some cases (operating as a unit) increased time and cost through the problems created by their use. Under these circumstances they represented little progress for either the Bureau of the Census or for the sociologist.

The innovations in definitions used and data collected succeeded in clarifying census data and in terms of the concerns of the Bureau of the Census may be defined as progress. They did not effect major changes in the census itself, however. Also an application of such progress to the field of sociological research shows no measurable positive relationship between the research and the innovations. The total result of the 1960 census innovations must therefore be evaluated in a final overview as changes and modifications which had little positive effect on the census itself and on sociological research. Thus, the changes were not progress at all, but simply innovations.

## BIBLIOGRAPHY

### Books

- Barclay, George W. The Techniques of Population Analysis. New York: Willy, 1958.
- Bishers, James M. Population Process in Social Systems. New York: The Free Press, 1959.
- Bogue, Donald J. The Population of the United States. Glencoe: The Free Press.
- Freedman, Ronald ed. Population: The Vital Revolution. Garden City, New York: Anchor Books, 1964.
- Glass, D. V. and Eversley, D. E. C. ed. Population in History. Chicago: Aldine Publishing Co., 1965.
- Hatt, Paul K. World Population and Future Resources. New York: American Book Co., 1952.
- Landis, Paul H. and Hatt, Paul K. Population Problems. 2d ed. New York: American Book Company, 1954.
- Petersen, William. Population. New York: Macmillan, 1961.
- Schmeckebier, Laurence F. The Statistical Work of the National Government. Baltimore: The Johns Hopkins Press, 1925.
- Smith, Thomas L. Fundamentals of Population Study. Chicago: Lippincott, 1960.
- Spengler, Joseph J. and Duncan, Otis Dudley. Demographic Analysis. Glencoe: The Free Press, 1956.
- \_\_\_\_\_. Population Theory and Policy. Glencoe: The Free Press, 1956.
- Taeuber, Conrad and Taeuber, Irene B. The Changing Population of the United States. New York: Willy, 1958.
- Thomlinson, Ralph. Population Dynamics. New York: Random House, 1965.
- Thompson, Warren S. and Lewis, David T. Population Problems. 5th ed. New York: McGraw-Hill, 1965.
- Wolfenden, Hugh H. Population Statistics and Their Compilation. rev.

ed. Chicago: Published for the Society of Actuaries by the University of Chicago Press, 1954.

Wright, Harold. Population. New York: Harcourt-Brace and Company, 1925.

Wrong, Dennis. Population. rev. ed. New York: Random House, 1962.

#### Public Documents

U. S. Bureau of the Census. Eighteenth Census of the United States: 1960. Population. Vol. I.

\_\_\_\_\_. Eighteenth Census of the United States: 1960. Housing. Vol. I.

\_\_\_\_\_. Seventeenth Census of the United States: 1950. Population. Vol. I.

\_\_\_\_\_. Seventeenth Census of the United States: 1950. Housing. Vol. I.

\_\_\_\_\_. United States Censuses of Population and Housing: Census Tracts. 1960. Vol. I.

\_\_\_\_\_. United States Censuses of Population and Housing: Procedural History. 1960.

\_\_\_\_\_. United States Censuses of Population and Housing: Principal Data Collection Forms and Procedures. 1960.

\_\_\_\_\_. United States Censuses of Population and Housing: Enumeration Time and Cost Study. 1960.

\_\_\_\_\_. Evaluation and Research Program of the United States Censuses of Population and Housing. 1960: Background, Procedures, and Forms.

\_\_\_\_\_. United States Bureau of the Census: Factfinder for the Nation. 1957.

#### Articles and Periodicals

Atwood, Albert W. and Aikman, Lonelle. "Census 1960: Profile of the Nation," National Geographic Magazine, (November, 1959), 696-714.

Anderson, C. Arnold. "Inequalities in Schooling in the South,"

- American Journal of Sociology, LX (March, 1955), 547-561.
- Ball, John C. and Lau, M. P. "The Chinese Narcotics Addict in the United States," Social Forces, 45 (September, 1966), 68-72.
- Ball, John C. and Ross, Alan and Simpson, Alice. "Incidence and Estimated Prevalence of Recorded Delinquency in A Metropolitan Area," American Sociological Review, 29 (February, 1964), 90-93.
- Bates, William M. "Narcotics, Negroes and the South," Social Forces, 45 (September, 1966), 61-67.
- Bell, Wendell and Force, Maryanne T. "Urban Neighborhood Types and Participation in Formal Associations," American Sociological Review, 21 (February, 1956), 25-34.
- 
- "Social Structure and Participation in Different Types of Formal Associations," Social Forces, 34 (May, 1956), 345-350.
- Bishers, James M., Laumann, Edward O. and Bradshaw, Benjamin S. "Ethnic Congregation, Segregation, Assimilation and Stratification," Social Forces, 42 (May, 1964), 482-489.
- Blalock, H. M. "Economic Discrimination and Negro Increase," American Sociological Review, 21 (October, 1956), 584-588.
- Boggs, Sarah L. "Urban Crime Patterns," American Sociological Review, 30 (December, 1965), 887-898.
- Bogue, Donald J. "Urbanism in the United States," American Journal of Sociology, LX (March, 1955), 471-486.
- Bonjean, Charles M. "Community Leadership: A Case Study and Conceptual Refinement," American Journal of Sociology, LXVIII (May, 1963), 672-681.
- Bowman, Lewis. "Racial Discrimination and Negro Leadership Problems: The Case of A Northern Community," Social Forces, 44 (December, 1965), 173-186.
- Bressler, Marvin and Westoff, Charles F. "Leadership and Social Change: The Reactions of A Special Group to Industrialization and Population Influx," Social Forces, 32 (March, 1954), 235-243.
- Brown, Morgan C. "The Status of Jobs and Occupations as Evaluated by an Urban Negro Sample," American Sociological Review, 20 (October, 1955), 165-172.
- Brunsmann, H. G. "1960 Census Data for Small Areas," Public Management, XLII (April, 1961), 80-82.
- Burma, John H. "Interethnic Marriage In Los Angeles, 1948-1959," Social Forces, 42 (December, 1964), 156-166.

- Ching, Ch'eng K'un. "A Study of Chinese Assimilation in Hawaii," Social Forces, 32 (October, 1953), 163-167.
- Chinoy, Eli. "Social Mobility Trends in the United States," American Sociological Review, 20 (June, 1955), 180-185.
- Clarke, John P. and Wenniger, Eugene P. "Socioeconomic Class and Area as Correlates of Illegal Behavior Among Juveniles," American Sociological Review, 27 (December, 1962), 897-909.
- Cooper, S. H. "New Census County Divisions and an Example of Its Implications," Association of the American Geographers Annals, LII (September, 1962), 325.
- "Counting the Noses," The Economist, CXCIV (March 26, 1960), 1215.
- Daly, Joseph F. "Organizational Problems Related to Large Scale Statistical Computations at the Bureau of the Census," American Statistician, II (April, 1957), 10-12.
- De Fleur, Melvin L. and Crosby, John. "Analyzing Metropolitan Dominance," Social Forces, 35 (October, 1956), 68-75.
- Duncan, Otis Dudley and Duncan, Beverly. "Residential Distribution and Occupational Stratification," American Journal of Sociology, LX (March, 1955), 493-503.
- \_\_\_\_\_. "Social Origins of Salaried and Self Employed Professional Workers," Social Forces, 44 (December, 1965), 186-189.
- Dye, Thomas R. "City Suburban Social Distance and Public Policy," Social Forces, 44 (September, 1965), 100-106.
- Farley, Reynolds. "Suburban Persistence." American Sociological Review, 29 (February, 1964), 38-47.
- Ferris, Abbott L. "Predicting Graduate Student Migration," Social Forces, 44 (March, 1965), 310-319.
- Fitzpatrick, Joseph P. "Intermarriage of PuertoRicans in New York City," American Journal of Sociology, LXXI (January, 1966), 395-406.
- Freeman, Howard E. and Kassebaum, Gene G. "The Illiterate American Society," Social Forces, 34 (May, 1956), 371-375.
- Galle, Omer F. and Taeuber, Karl E. "Metropolitan Migration and Intervening Opportunities," American Sociological Review, 31 (February, 1966), 5-13.
- Geschwender, James A. "Social Structure and the Negro Revolt: An Examination of Some Hypotheses," Social Forces, 43 (December,

1964), 248-256.

Glick, Paul C. "The 1960 Censuses As A Source for Social Research," American Sociological Review, 27 (August, 1962), 581-585.

\_\_\_\_\_. "Plans for the 1960 Census of Population," Population Index, XXV (October, 1959), 289-301.

Goldstein, Sidney. "Repeated Migration as A Factor in High Mobility Rates," American Sociological Review, 19 (October, 1954), 606-615.

\_\_\_\_\_. and Mayer Kurt. "Migration and Journey to Work," Social Forces, 42 (May, 1964), 472-481.

\_\_\_\_\_. "Population Decline and the Social Demographic Structure of an American City," American Sociological Review, 29 (February, 1964), 48-54.

Goldstein, Bernard. "Some Aspects of the Nature of Unionism Among Salaried Professionals in Industry," American Sociological Review, 20 (April, 1955), 199-205.

Gordon, M. F. and Starsinic, D. E. "1960 Urbanized Areas Programs," Association of the American Geographers Annals, L (September, 1957), 163-170.

Green, Norman E. "Scale Analysis of Urban Structures: A Study of Birmingham, Ala," American Sociological Review, 21 (February, 1956), 38-43.

Groat, H. Theodore. "Internal Migration Patterns of A Population Subgroup: College Students 1887-1958," American Journal of Sociology, LXIX (January, 1964), 383-394.

Gross, Neal. "Social Class Identification in the Urban Fringe," American Sociological Review, 18 (June, 1953), 248-253.

Gurin, Patricia and Epps, Edgar. "Some Characteristics of Students from Poverty Backgrounds Attending Predominantly Negro Colleges in the Deep South," Social Forces, 45 (September, 1966), 27-39.

Hamilton, Richard F. "Income Class and Reference Groups," American Sociological Review, 29 (August, 1964), 576-579.

Hansen, Morris, Hurwitz, William N., and Leon Pritzker. "The Accuracy of Census Results," American Sociological Review, 18 (August, 1953), 416-423.

Hare, Nathan. "Recent Trends in the Occupational Mobility of Negroes: 1930-1960: An Intracolor Analysis," Social Forces, 44 (December, 1965), 166-173.

- Henry, Andrew F. "Residential Turnover and Family Composition of Home-owners in Natick, Mass," Social Forces, 31 (May, 1953), 355-360.
- Hitt, Homer L. "The Role of Migration in Population Change Among the Aged," American Sociological Review, 19 (April, 1954), 194-200.
- "How Many Americans," The Economist, CXCIV (June 25, 1960), 1339.
- Kahl, Joseph A. and Davis, James A. "A Comparison of Indexes of Socio-Economic Statuses," American Sociological Review, 20 (June, 1955), 317-325.
- Kelley, K. Dennis and Chambliss, William J. "Status Consistency and Political Attitudes," American Sociological Review, 31 (June, 1966), 241-249.
- Kerchoff, Alan C. "Notes and Comments on the Meaning of Residential Propinquity as A Factor in Mate Selection," Social Forces, 34 (March, 1956), 238-240.
- King, Charles E. "The Process of Social Stratification Among an Urban Southern Minority Population," Social Forces, 31 (May, 1953), 352-355.
- Laumann, Edward O. "Subjective Social Distance and Urban Occupational Stratification," American Journal of Sociology, LXX (May, 1965), 682-694.
- \_\_\_\_\_. and Louis Guttman. "Contiguity of Occupations," American Sociological Review, 31 (April, 1966), 169-278.
- Lieberson, Stanley, and Silverman, Arnold. "The Precipitant Underlying Conditions of Race Riots," American Sociological Review, 30 (December, 1965), 887-898.
- Litt, Edgar. "Civic Education, Community Norms and Political Indoctrination," American Sociological Review, 28 (February, 1963), 69-75.
- Lundberg, George A. "Occupations and Class Alignments in the United States 1870-1950," Social Forces, 34 (December, 1955), 128-130.
- Lyman, Elizabeth L. "Occupational Differences in the Values Attached to Work," American Journal of Sociology, LXI (September, 1955), 138-144.
- MacLachlan, John H. "Recent Population Trends in the South East," Social Forces, 35 (December, 1956), 147-154.
- Marchis, Joseph R. and Turbeville, Gus. "The Effects of Residential Propinquity on Marriage Selection," American Journal of Sociology, LVII (May, 1953), 592-595.



- Martin, Walter T. "A Consideration of Differences in the Extent and Location of the Formal Associational Activities of Rural-Urban Fringe Residents," American Sociological Review, 17 (December, 1952), 687-694.
- \_\_\_\_\_. "Some Socio-Psychological Aspects of Adjustment to Residence Location in the Rural-Urban Fringe," American Sociological Review, 18 (June, 1953), 248-253.
- Marden, Parker G. "A Demographic and Ecological Analysis of the Distribution of Physicians in Metropolitan America," American Journal of Sociology, 72 (November, 1966), 290-300.
- Mayo, Selz C. "Social Change, Social Movements and the Disappearing Sectional South," Social Forces, 43 (October, 1964), 1-10.
- McRae, Duncan. "Occupations and the Congressional Vote 1940-1950," American Sociological Review, 20 (June, 1955), 332-340.
- McTavish, Donald G. "A Method for More Reliably Coding Detailed Occupations into Duncan's Socio-Economic Categories," American Sociological Review, 29 (June, 1964), 401-406.
- Miller, Delbert C. "Town and Gown: The Power Structure of A University Town," American Journal of Sociology, LXVIII (May, 1963), 432-443.
- Monahan, Thomas P. and Monohan, Elizabeth. "Some Characteristics of American Negro Leaders," American Sociological Review, 21 (October, 1956), 589-596.
- Morse, Nancy and Weiss, Robert S. "The Functions and Meaning of Work: The Job," American Sociological Review, 20 (April, 1955), 191-198.
- More, Douglas. "Social Origins and Occupational Adjustment," Social Forces, 35 (October, 1956), 16-19.
- Myers, Jerome K. "Note on the Homogeneity of Census Tracts: A Methodological Problem in Urban Ecological Research," Social Forces, 32 (May, 1954), 364-366.
- Nam, Charles B. and Powers, Mary G. "Variations in Socio-economic Structure by Race, Residence and the Life Cycle," American Sociological Review, 30 (February, 1965), 97-103.
- Ogburn, William F. and Grigg, Charles M. "Factors Related to the Virginia Vote on Segregation," Social Forces, 34 (May, 1956), 301-309.
- Penalosa, Fenanado and McDonagh, Edward C. "Social Mobility in A Mexican-American Community," Social Forces, 44 (May, 1966),



498-505.

Quinney, Richard. "Mortality Differentials in a Metropolitan Area," Social Forces, 43 (December, 1964), 222-230.

Redick, Richard W. "Population Growth and Distribution in Central Cities 1940-1950," American Sociological Review, 21 (February, 1956), 38-43.

Reiss, Albert J. and Kitagawa, Evelyn M. "Demographic Characteristics and Job Mobility of Migrants in Six Cities," Social Forces, 32 (October, 1953), 70-75.

Schmitt, Robert C. "Research Note of Components of Change in Marital Status on Oahu 1940-1950," Social Forces, 34 (March, 1953), 238-240.

Rhodes, Albert L., Reiss, Albert J., and Duncan, Otis Dudley. "Occupational Segregation in A Metropolitan School System," American Journal of Sociology, LXX (May, 1965), 682-694.

Schmid, Calvin F. and Nobb, Charles E. "Socio-economic Differentials Among Non-White Races," American Sociological Review, 30 (December, 1965), 909-922.

Schnore, Leo F. "The Functions of Metropolitan Suburbs," American Journal of Sociology, LXI (March, 1956), 453-458.

\_\_\_\_\_. "The Socio-Economic Status of Cities and Suburbs," American Sociological Review, 28 (February, 1962), 76-85.

\_\_\_\_\_. "Some Correlates of Urban Size," American Journal of Sociology, LXIX (September, 1963), 185-193.

\_\_\_\_\_. and Evenson, Philip C. "Segregation in Southern Cities," American Journal of Sociology, 72 (July, 1966), 58-67.

Scaff, Alvin. "The Effect of Commuting on Participation in Community Organizations," American Sociological Review, 17 (October, 1952), 572-580.

Sewell, William H. and Armer, J. Michael. "Neighborhood Context and College Plans," American Sociological Review, 31 (April, 1966), 159-168.

\_\_\_\_\_. "Community and College Plans," American Sociological Review, 29 (February, 1964), 38-47.

Shyrock, Henry S., Jr. "The Natural History of Standard Metropolitan Areas," American Journal of Sociology, LXIII (September, 1957), 163-170.

- Siegel, Jacob S., Shyrock, Henry and Greenber, Benjamin. "Accuracy of Postcensal Estimates of Population for States and Cities," American Sociological Review, 19 (August, 1954), 412-417.
- Silvey, T. F. "FOSDIC - New Marvel of Automation Will Count You for the 1960 Census," American Federationist, LXVII (March, 1960), 8-10.
- Stolnitz, George J. "Population Composition and Fertility Trends," American Sociological Review, 21 (December, 1956), 738-743.
- Stycos, J. Mayone. "Family and Fertility in Puerto Rico," American Sociological Review, 17 (October, 1952), 572-580.
- Sweetser, Frank L. "Population, Area and Density of Comparable Metropolitan Districts and SMA's," American Sociological Review, 20 (August, 1955), 414-419.
- Taeuber, Karl E. and Taeuber, Alma F. "The Negro as An Immigrant Group: Recent Trends in Ethnic and Racial Segregation in Chicago," American Journal of Sociology, LXIX (January, 1964), 374-382.
- Taeuber, Karl E. and Taeuber, Alma F. "White Migration and Socio-economic Differences Between Cities and Suburbs," American Sociological Review, 29 (October, 1964), 718-729.
- \_\_\_\_\_. "The Changing Character of Negro Migration," American Journal of Sociology, LXX (January, 1965), 429-441.
- \_\_\_\_\_. and Cain, Glen G. "Occupational Assimilation and the Competitive Process, A Reanalysis," American Journal of Sociology, 72 (November, 1966), 273-285.
- Tuchman, Edward A. "Sociometric Variations Among Ethnic Groups," American Journal of Sociology, LXX (September, 1964), 319-331.
- Udry, Richard. "Marital Instability by Race, Sex, Education, and Occupation Using 1960 Census Data," American Journal of Sociology, 72 (September, 1965), 203-209.
- Wallace, David. "Some Functional Aspects of Stability and Change in Voting," American Journal of Sociology, LXIX (September, 1963), 161-170.
- Wilber, George L. "The Growth of Metropolitan Areas in the South," Social Forces, 42 (May, 1964), 428-489.

**APPENDIX**

## PLEASE BE SURE TO LIST—

- All members of your family living with you, including:
- All other relatives living here.
- Lodgers and boarders living here.
- Servants, hired hands, others not related to you who are
- Any one else staying here but who has no other home.

## ALSO LIST—

Persons who usually live here but who are away temporarily

## SECTION A—In this section list:

1. Everyone who usually lives here, whether related to you or not.
2. All persons staying here who have no other home.

| Line No. | NAMES OF PERSONS LIVING HERE ON APRIL 1, 1960, AND THOSE STAYING HERE WHO HAVE NO OTHER HOME |            |                | What is the relationship to the head of this household?<br>(For example, wife, son, grandson, mother-in-law, lodger, etc.) |
|----------|--|------------|----------------|--|
|          | Last name  | First name | Middle initial |  |
| 1        |  |            |                | HEAD OF HOUSEHOLD  |
| 2        |  |            |                |  |
| 3        |  |            |                |  |
| 4        |  |            |                |  |
| 5        |  |            |                |  |
| 6        |  |            |                |  |
| 7        |  |            |                |  |
| 8        |  |            |                |  |
| 9        |  |            |                |  |
| 10       |  |            |                |  |

Write names in this order

- Head of household on first line
- Wife of head
- Unmarried children, oldest first
- Married children and their families
- Other relatives
- Others not related to head of household

IF THERE ARE MORE THAN 10 NAMES ON YOUR LIST, USE AN ADDITIONAL SHEET

(P2)

(P3)

## SECTION B—NEXT: Please answer the questions in this section to help the Census Taker count your household correctly.

1. Does more than one family live in this home?

Yes ☐No ☐

If "Yes," do they live and eat with your family?

Yes ☐No ☐

Be sure they are listed in Section A, above.

2. Is there anyone left out of Section A because you were not sure whether he should be listed, for example, a new baby still in the hospital, or a lodger who also has another home?

Yes ☐No ☐

If "Yes," write name(s) here:

## SECTION C—List below all persons who were staying here overnight on Thursday, March 31, 1960, except those you have already listed.

| Name of visitor<br>(If there are more than 2 names use an additional sheet) | What is the relationship of this person to the head of the household where he usually lives? | Male or Female<br>(M or F) | Is this person—<br>White<br>Negro<br>(etc.)? | When was this person born? |      | Is this person—<br>Married<br>Widowed<br>Divorced<br>Separated<br>Single (never married)? | Home |
|---|--|----------------------------|--|----------------------------|------|---|------|
| (1)   | (2)  | (3)                        | (4)  | (5)<br>Month               | Year | (6)<br>(Leave blank for children born after March 31, 1946)                               |      |
|   |  |                            |  |                            |      |   |      |
|   |  |                            |  |                            |      |   |      |
|   |  |                            |  |                            |      |   |      |

Form 60PH-6.—Advance Census Report (inside, left)

(Used in large cities)

## DO NOT LIST—

you including babies.

d to you who are living here.  
s no other home.

- College students who are away at college (or who are here only on vacation).
- Persons stationed away from here in the Armed Forces.
- Persons away in institutions, such as a sanatorium, nursing home, home for the aged, mental hospital.

*They will be counted there.*

s away temporarily on business, on vacation, or in a general hospital.

| Is the relationship of each person the head of this household?<br>(Example, wife, son, daughter, husband, mother-in-law, lodger, lodger's wife)<br>(P3) | Male or Female<br>(M or F)<br>(P4) | Is this person—<br>White<br>Negro<br>American Indian<br>Japanese<br>Chinese<br>Filipino<br>Hawaiian<br>Part Hawaiian<br>Aleut<br>Eskimo<br>(etc.)?<br>(P5) | When was this person born?<br>(P6) |      | Is this person—<br>Married<br>Widowed<br>Divorced<br>Separated<br>Single (never married)?<br>(Leave blank for children born after March 31, 1946)<br>(P7) | Line No. |
|---|------------------------------------|--|------------------------------------|------|---|----------|
|   |                                    |  | Month                              | Year |   |          |
| HEAD OF HOUSEHOLD   |                                    |  |                                    |      |   | 1        |
|   |                                    |  |                                    |      |   | 2        |
|   |                                    |  |                                    |      |   | 3        |
|   |                                    |  |                                    |      |   | 4        |
|   |                                    |  |                                    |      |   | 5        |
|   |                                    |  |                                    |      |   | 6        |
|   |                                    |  |                                    |      |   | 7        |
|   |                                    |  |                                    |      |   | 8        |
|   |                                    |  |                                    |      |   | 9        |
|   |                                    |  |                                    |      |   | 10       |

e whether he should be listed—  
also has another home?

3. Is there anyone listed in Section A who is away from home now?

Yes ☐

No ☐

If "Yes," write name(s) here:

e already listed in Section A. Give their home addresses so that the Census Bureau can make sure it counts these people.

| Visitor's home address              |  |                   | If visitor's home is in a rural area—<br>Box No., Rural Route No., and full description of location<br>(10) | Is there anyone else to report this person?<br>(11) |                          |
|-------------------------------------|--|-------------------|---|---|--------------------------|
| Home house number and street<br>(7) | Home city or town and postal zone<br>(8) | Home State<br>(9) |   | Yes   |                          |
|                                     |  |                   |   | <input type="checkbox"/>                            | <input type="checkbox"/> |
|                                     |  |                   |   | <input type="checkbox"/>                            | <input type="checkbox"/> |

PLEASE ANSWER QUESTIONS IN SECTIONS D AND E ON BACK PAGE →

Form 60PH-6.—Advance Census Report (inside, right)

(Used in large cities)

**SECTION D**—These questions are about the place where you and the people you listed in Section A live. They refer to your house or the part of the house which you occupy, or to the apartment, flat, or rooms in which you live.

H5. Do you have a kitchen or cooking equipment? (Check one)

For use of the people in your household only (those you listed in Section A)?... ☐

Shared with another household or no cooking equipment?..... ☐

H8. How many rooms are in your house or apartment? (Count a kitchen as a room but do not count bathrooms)

Number of rooms.....

H9. Is there hot and cold running water in this house or building? (Check one)

Hot and cold running water inside the house or building..... ☐

Only cold running water inside..... ☐

Running water on property but not inside building..... ☐

No running water..... ☐

H10. Is there a flush toilet in this house or building? (Check one)

Yes, for the use of this household only..... ☐

Yes, but shared with another household..... ☐

No flush toilet for the use of this household..... ☐

H11. Is there a bathtub or shower in this house or building? (Check one)

Yes, for the use of this household only..... ☐

Yes, but shared with another household..... ☐

No bathtub or shower for the use of this household..... ☐

H12. Is the house, part of the house, or apartment in which you live? (Check one)

Owned or being bought by you or someone else in your household? .... ☐

Rented for cash?..... ☐

Occupied without payment of cash rent?..... ☐

—————> Answer question H15 and fill Section E

—————> Answer question H16 and fill Section E

—————> Skip to Section E

**HOME OWNERS AND BUYERS PLEASE ANSWER THIS QUESTION**

H15. About how much do you think this property would sell for on today's market? (Check one)

Under \$5,000..... ☐      \$15,000 to \$17,400..... ☐

\$5,000 to \$7,400..... ☐      \$17,500 to \$19,900..... ☐

\$7,500 to \$9,900..... ☐      \$20,000 to \$24,900..... ☐

\$10,000 to \$12,400..... ☐      \$25,000 to \$34,000..... ☐

\$12,500 to \$14,900..... ☐      \$35,000 or more..... ☒

**RENTERS PLEASE ANSWER THIS QUESTION**

H16. If you pay your rent by the month—

What is your monthly rent? \$.....00  
(Nearest dollar)

OR

If you pay your rent by the week or some other period of time—

What is your rent and what period does it cover?

\$.....00 per .....  
(Nearest dollar) (Week, year, etc.)

**SECTION E—PLEASE FILL SECTION E**

1. Does anyone else live in this building or anywhere else on this property?

Yes ☐ No ☐

2. As far as you know, are there any vacant apartments or vacant rooms for rent in this building or elsewhere on this property?

Yes ☐ No ☐

3. Name of person who filled this form

4. Your address (House number, street, city, State)

5. Your telephone No.

**SECTION F—FOR CENSUS TAKER'S USE ONLY**

1. E.D. No.

2. Page No.

3. Housing data on ACR

a. ☐ Recorded as 1 HU.

b. ☐ Revised.

Fill Inside Page for Population Census

**HOLD THIS REPORT FOR THE CENSUS TAKER—DO NOT MAIL**

**PLEASE NOTE:** These housing questions begin with number H19 because the Census Taker has already obtained the answers to the earlier questions.

The term "house" or "apartment" covers your house or part of the house you occupy, or the apartment, flat, or rooms in which you live. Most of these questions refer to your own house or apartment but note that questions H20, H33, and H34 are about the whole building in which you live.

**H19. How many bedrooms are in your house or apartment?**  
Count rooms whose main use is as bedrooms even if they are occasionally used for other purposes.  
If you live in a one-room apartment without a separate bedroom, check "No bedroom."

No bedroom ☐  
1 bedroom ☐  
2 bedrooms ☐  
3 bedrooms ☐  
4 bedrooms or more ☐

**H20. About when was this house originally built?**

In 1959 or 1960 ☐  
1955 to 1958 ☐  
1950 to 1954 ☐  
1940 to 1949 ☐  
1930 to 1939 ☐  
1929 or earlier ☐

**H21. How is your house or apartment heated?**  
Check **ONLY** the kind of heat you use the most.

Heated by:

Steam or hot water ☐  
Warm air furnace with individual room registers ☐  
Floor, wall, or pipeless furnace ☐  
Built-in electric units ☐  
Room heater(s) connected to chimney or flue ☐  
Room heater(s) not connected to chimney or flue ☐  
Other method—Write in: ☐

Not heated ☐

**H22. Here is a list of fuels. In the first column, check which one is used most for heating. In the second column, check the one used most for cooking. In the third column, check the fuel used most for heating water.**

(Check one in each column)

| List of fuels   | A<br>House<br>heating<br>fuel | B<br>Cooking<br>fuel     | C<br>Water<br>heating<br>fuel |
|---|-------------------------------|--------------------------|-------------------------------|
| Coal or coke  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Wood  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Utility gas from underground pipes serving the neighborhood | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Bottled, tank, or LP gas                                    | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Electricity   | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Fuel oil, kerosene, etc.                                    | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| Other fuel  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |
| No fuel used  | <input type="checkbox"/>      | <input type="checkbox"/> | <input type="checkbox"/>      |

**H23. Do you have a clothes washing machine?**  
Do not count machines shared with any other household in this building.

Machine with wringer or separate spinner ☐  
Automatic or semi-automatic machine ☐  
Washer-dryer combination (single unit) ☐  
No washing machine ☐

**H24. Do you have an electric or gas clothes dryer?**  
Do not count dryers shared with any other household in this building.

Electrically heated dryer ☐  
Gas heated dryer ☐  
No dryer ☐

**H25. Do you have any television sets?**  
Count only sets in working order. Count floor, table, and portable television sets as well as combinations.

1 set ☐  
2 sets or more ☐  
No television sets ☐

**H26. Do you have any radios?**  
Count only sets in working order. Count floor, table, and portable radios as well as radio combinations. Do not count automobile radios.

1 radio ☐  
2 radios or more ☐  
No radios ☐

**H27. Do you have any air conditioning?**  
Count only equipment which cools the air by refrigeration.

Room unit—1 only ☐  
Room units—2 or more ☐  
Central air conditioning system ☐  
No air conditioning ☐

**H28. Do you have a home food freezer which is separate from your refrigerator?**

Yes ☐  
No ☐

**H30. How many bathrooms are in your house or apartment?**  
A complete bathroom has both flush toilet and bathing facilities (bathtub or shower).  
A partial bathroom has a flush toilet or bathing facilities, but not both.

No bathroom, or only a partial bathroom ☐  
1 complete bathroom ☐  
1 complete bathroom, plus partial bathroom(s) ☐  
2 or more complete bathrooms ☐

**H33. Is this house built:**

with a basement? ☐  
on a concrete slab? ☐  
in another way? ☐

**H34. Does this building have:**

3 stories or less? ☐  
4 stories or more—  
with elevator? ☐  
walk-up? ☐

Page

Form 60PH-8.—Household Questionnaire (housing section, left)

(Used for sample in large cities)

2



| P2. Name of this person<br><small>(Enter last name first)</small>   |  | QUESTIONS FOR |
|---|--|---------------|
| <p><b>P3. What is the relationship of this person to the head of this household?</b></p> <p>Head <input type="checkbox"/></p> <p>Wife of head <input type="checkbox"/></p> <p>Son or daughter of head <input type="checkbox"/></p> <p>Other—Write in:<br/><small>(For example: Son-in-law, mother, uncle, cousin, etc.)</small></p>   | <p><b>P14. What is the highest grade (or year) of regular school this person has ever attended? (Check one box)</b></p> <p>If now attending a regular school or college, check the grade (or year) he is in. If it is in junior high school, check the box that stands for that grade (or year).</p> <p>Never attended school <input type="checkbox"/></p> <p>Kindergarten <input type="checkbox"/></p> <p>Elementary school (Grade) <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8</p> <p>High school (Year) <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4</p> <p>College (Year) <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 or more</p> |               |
| <p><b>P8. Where was this person born?</b><br/><small>(If born in hospital, give residence of mother, not location of hospital)</small></p> <p>If born in the United States, write name of State.<br/>If born outside the United States, write name of country, U.S. possession, etc. Use international boundaries as now recognized by the U.S. Distinguish Northern Ireland from Ireland (Eire).</p> <p><small>(State, foreign country, U.S. possession, etc.)</small></p>   | <p><b>P15. Did he finish the highest grade (or year) he attended?</b></p> <p>Finished this grade <input type="checkbox"/> Did not finish this grade <input type="checkbox"/> Never attended school <input type="checkbox"/></p>  |               |
| <p><b>P9. If this person was born outside the U.S.—</b><br/><b>What language was spoken in his home before he came to the United States?</b></p>  | <p><b>P16. Has he attended regular school or college at any time since February 1, 1960?</b></p> <p>If he has attended only nursery school, business or trade school, or adult education classes, check "No"</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/></p>   |               |
| <p><b>P10. What country was his father born in?</b></p> <p>United States <input type="checkbox"/> OR <input type="checkbox"/><br/><small>(Name of foreign country, or Puerto Rico, Guam, etc.)</small></p>  | <p><b>P17. Is it a public school or a private school?</b></p> <p>Public school <input type="checkbox"/></p> <p>Private or parochial school <input type="checkbox"/></p>  |               |
| <p><b>P11. What country was his mother born in?</b></p> <p>United States <input type="checkbox"/> OR <input type="checkbox"/><br/><small>(Name of foreign country, or Puerto Rico, Guam, etc.)</small></p>  | <p><b>P18. If this person has ever been married—</b><br/><b>Has this person been married more than once?</b></p> <p>Once <input type="checkbox"/> More than once <input type="checkbox"/></p>  |               |
| <p><b>P12. When did this person move into this house (or apartment)?</b><br/><small>(Check date of last move)</small></p> <p>In 1959 or 1960 <input type="checkbox"/> Jan. 1954 to March 1955 <input type="checkbox"/></p> <p>In 1958 <input type="checkbox"/> 1950 to 1953 <input type="checkbox"/></p> <p>In 1957 <input type="checkbox"/> 1940 to 1949 <input type="checkbox"/></p> <p>April 1955 to Dec. 1956 <input type="checkbox"/> 1939 or earlier <input type="checkbox"/></p> <p>Always lived here <input type="checkbox"/></p>   | <p><b>P19. When did he get married?</b></p> <p>Month <input type="text"/> Year <input type="text"/></p>  |               |
| <p><b>P13. Did he live in this house on April 1, 1955?</b><br/><small>(Answer 1, 2, or 3)</small></p> <p>1. Born April 1955 or later <input type="checkbox"/></p> <p>OR</p> <p>2. Yes, this house <input type="checkbox"/></p> <p>OR</p> <p>3. No, different house <input type="checkbox"/></p> <p>Where did he live on April 1, 1955?</p> <p>a. City or town <input type="text"/></p> <p>b. If city or town—Did he live inside the city limits? — { Yes <input type="checkbox"/> No <input type="checkbox"/></p> <p>c. County AND State, foreign country, U.S. possession, etc. <input type="text"/></p> | <p><b>P20. If this is a woman who has ever been married—</b><br/><b>How many babies has she ever had, not counting stillbirths?</b></p> <p>Do not count her stepchildren or adopted children.</p> <p><input type="text"/> OR None <input type="checkbox"/><br/><small>(Number)</small></p>   |               |
| <p><b>P21. When was this person born?</b></p> <p>Born before April 1946 <input type="checkbox"/> Born April 1946 or later <input type="checkbox"/></p> <p>Please go on with questions P22 to P35. Answer the questions regardless of whether the person is a housewife, student, or retired person, or a part-time or full-time worker.</p>   |  |               |
| <p>Space for any notes about the entries for this person</p>  |  |               |

Page

Form 60PH-8.—Household Questionnaire (population section, left)  
(Used for sample in large cities. The population questions were repeated on succeeding pages of this form, for two more persons)

**THIS PERSON** →

**P22. Did this person work at any time last week?**  
Include part-time work such as a Saturday job, delivering papers, or helping without pay in a family business or farm. Do not count own housework.  
Yes ☐ No ☐

**P23. How many hours did he work last week (at all jobs)?**  
(If exact figure not known, give best estimate)

|   |   |
|---|---|
| 1 to 14 hours <input type="checkbox"/>  | 40 hours <input type="checkbox"/>         |
| 15 to 29 hours <input type="checkbox"/> | 41 to 48 hours <input type="checkbox"/>   |
| 30 to 34 hours <input type="checkbox"/> | 49 to 59 hours <input type="checkbox"/>   |
| 35 to 39 hours <input type="checkbox"/> | 60 hours or more <input type="checkbox"/> |

**P24. Was this person looking for work, or on layoff from a job?**  
Yes ☐ No ☐

**P25. Does he have a job or business from which he was temporarily absent all last week because of illness, vacation, or other reasons?**  
Yes ☐ No ☐

**P26. When did he last work at all, even for a few days?**  
(Check one box)

|                                       |  |
|---------------------------------------|--|
| Working now <input type="checkbox"/>  | 1949 or earlier <input type="checkbox"/> |
| In 1960 <input type="checkbox"/>      |  |
| In 1959 <input type="checkbox"/>      | Never worked <input type="checkbox"/>    |
| 1955 to 1958 <input type="checkbox"/> |  |
| 1950 to 1954 <input type="checkbox"/> |  |

**P27. Occupation (Answer 1, 2, or 3)**

1. This person last worked in 1949 or earlier ☐  
This person has never worked ☐

OR

2. On active duty in the Armed Forces now ☐

OR

3. Worked in 1950 or later ☐ Answer a to e, below.  
Describe this person's job or business last week, if any, and write in name of employer. If this person had no job or business last week, give information for last job or business since 1950.

a. For whom did he work?  
(Name of company, business, organization, or other employer)

b. What kind of business or industry was this?  
Describe activity at location where employed.  
(For example: County junior high school, auto assembly plant, TV and radio service, retail supermarket, road construction, farm)

c. Is this primarily: (Check one box)

|  |
|--|
| Manufacturing <input type="checkbox"/>   |
| Wholesale trade <input type="checkbox"/>   |
| Retail trade <input type="checkbox"/>  |
| Other (services, agriculture, government, construction, etc.) <input type="checkbox"/> |

d. What kind of work was he doing?  
(For example: 8th grade English teacher, paint sprayer, repairs TV sets, grocery checker, civil engineer, farmer, farm hand)

e. Was this person: (Check one box)

|  |
|--|
| Employee of private company, business, or individual, for wages, salary, or commissions <input type="checkbox"/> |
| Government employee (Federal, State, county, or local) <input type="checkbox"/>                                  |
| Self-employed in own business, professional practice, or farm <input type="checkbox"/>                           |
| Working without pay in a family business or farm <input type="checkbox"/>  |

**If this person worked last week, answer questions P28 and P29.**

**P28. What city and county did he work in last week?**  
If he worked in more than one city or county, give place where he worked most last week.

a. City or town \_\_\_\_\_

b. If city or town—Did he work inside the city limits? { Yes ☐ No ☐

c. County \_\_\_\_\_ State \_\_\_\_\_

**P29. How did he get to work last week?**  
(Check one box for principal means used last week)

|   |   |   |
|---|---|---|
| Railroad <input type="checkbox"/>           | Taxicab <input type="checkbox"/>                  | Walk only <input type="checkbox"/>      |
| Subway or elevated <input type="checkbox"/> | Private auto or car pool <input type="checkbox"/> | Worked at home <input type="checkbox"/> |
| Bus or streetcar <input type="checkbox"/>   | Other means—Write in: _____                       |   |

**P30. Last year (1959), did this person work at all, even for a few days?**  
Yes ☐ No ☐

**P31. How many weeks did he work in 1959, either full-time or part-time? Count paid vacation, paid sick leave, and military service as weeks worked.**  
(If exact figure not known, give best estimate)

|   |   |
|---|---|
| 13 weeks or less <input type="checkbox"/> | 40 to 47 weeks <input type="checkbox"/> |
| 14 to 26 weeks <input type="checkbox"/>   | 48 to 49 weeks <input type="checkbox"/> |
| 27 to 39 weeks <input type="checkbox"/>   | 50 to 52 weeks <input type="checkbox"/> |

**P32. How much did this person earn in 1959 in wages, salary, commissions, or tips from all jobs?**  
Before deductions for taxes, bonds, dues, or other items.  
(Enter amount or check "None." If exact figure not known, give best estimate.)  
\$ \_\_\_\_\_ .00 OR None ☐  
(Dollars only)

**P33. How much did he earn in 1959 in profits or fees from working in his own business, professional practice, partnership, or farm?**  
Net income after business expenses. (Enter amount or check "None." If exact figure not known, give best estimate. If business or farm last money, write "Loss" after amount.)  
\$ \_\_\_\_\_ .00 OR None ☐  
(Dollars only)

**P34. Last year (1959), did this person receive any income from:**

|                                      |  |
|--------------------------------------|--|
| Social security                      |  |
| Pensions                             |  |
| Veteran's payments                   |  |
| Rent (minus expenses)                |  |
| Interest or dividends                |  |
| Unemployment insurance               |  |
| Welfare payments                     |  |
| Any other source not already entered |  |

Yes ☐ No ☐

What is the amount he received from these sources in 1959? (If exact figure not known, give best estimate)  
\$ \_\_\_\_\_ .00  
(Dollars only)

**P35. If this is a man—**  
Has he ever served in the Army, Navy, or other Armed Forces of the United States?  
Yes ☐ No ☐ (Check one box on each line)

Was it during:

|  |                              |                             |
|--|------------------------------|-----------------------------|
| Korean War (June 1950 to Jan. 1955) <input type="checkbox"/>       | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| World War II (Sept. 1940 to July 1947) <input type="checkbox"/>    | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| World War I (April 1917 to Nov. 1918) <input type="checkbox"/>     | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| Any other time, including present service <input type="checkbox"/> | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

QUESTIONS FOR NEXT PERSON ARE ON FOLLOWING PAGE →

## Form 60PH-8.—Household Questionnaire (population section, right)

(Used for sample in large cities. The population questions were repeated on succeeding pages of this form, for two more persons)

**CONFIDENTIAL**—The Census is required by the United States Constitution and further authorized by 13 U.S.C. 5, 9, 141, 221-4. The law requires that the inquiries be answered completely and accurately, and guarantees that the information furnished will be accorded confidential treatment. The Census report cannot be used for purposes of taxation, investigation, or regulation.

U.S. DEPARTMENT OF COMMERCE—BUREAU OF ECONOMIC ANALYSIS  
**1960 CENSUS OF POPULATION AND HOUSING**

**FIRST**—Copy sample key and address from listing sheet to Pt. H1, and H2.  
**SECOND**—Determine if more than 1 HU.  
**THIRD**—List names in P2; mark relationship in P3. Before listing "other relatives" or "nonrelatives," find out if they have separate quarters.  
**FOURTH**—If no AGR, check listing. Are there anyone else who usually lives here but is temporarily away? Is there anyone staying here now who has no usual residence elsewhere? I have \_\_\_\_\_ names now. Is that right?

**P1. Sample key**  
Household heads  
Persons listed out of order  
All "GQ" persons  
Vacant units

**P2. Name—Enter last name first.**  
List persons in this order:  
The head  
His wife  
Unmarried sons and daughters (in order of age)  
Married sons and daughters and their families  
Other relatives  
Other persons, such as lodgers, maids, or hired hands who live in and their relatives living in

**P3. What is his relationship to the head of the household?**  
Head  
Wife of head  
Son or daughter  
Other relative  
Nonrelative  
Lodger

**P4. Sex**  
Male  
Female

**P5. Color or race**  
White  
Negro  
American Indian  
Alaskan  
Chinese  
Filipino  
Other—Specify other

**P6. What is the month of birth?**  
Jan  
Feb  
Mar  
Apr  
May  
Jun  
Jul  
Aug  
Sep  
Oct  
Nov  
Dec

**H1. Sample key**  
If "GQ," omit H3 through H16

**H2. Address**  
Street, avenue, or road  
House no. and apartment no.

**THESE ITEMS ARE TO BE FILLED FOR ALL HOUSING UNITS, WHETHER OCCUPIED OR VACANT**

**H3. Type of housing unit**  
House, apt., flat  
Trailer

**H4. Access to unit**  
Direct from outside or common hall  
Through another unit

**H5. Kitchen or cooking equipment**  
For exclusive use  
Shared or none

**H6. Condition**  
Sound  
Deteriorating  
Dilapidated

**H7. Occupancy**  
Occupied  
Vacant  
Year-round  
Migratory wkr  
Seasonal

**H8. How many rooms are in this unit? Count kitchen but not bathroom**  
1  
2  
3  
4  
5  
6  
7  
8  
9  
10+

**H9. Is there hot running water (for this unit)?**  
Running water in structure  
Hot and cold  
Cold only  
Run. water outside  
No running water

**H10. Is there a flush toilet (for this unit)?**  
For exclusive use  
Shared  
None

**H11. Is there a bathtub or shower (for this unit)?**  
For exclusive use  
Shared  
None

**H12. Is this unit occupied by someone living in it as of April 1, 1960?**  
Owned or being bought  
Rented  
No one

**H13. Is this unit occupied by someone living in it as of April 1, 1960?**  
Owned or being bought  
Rented  
No one

**H14. Is this unit occupied by someone living in it as of April 1, 1960?**  
Owned or being bought  
Rented  
No one

**H15. Is this unit occupied by someone living in it as of April 1, 1960?**  
Owned or being bought  
Rented  
No one

**H16. Is this unit occupied by someone living in it as of April 1, 1960?**  
Owned or being bought  
Rented  
No one

1960 CENSUSES OF POPULATION AND HOUSING

~~XXXX~~ ~~XX~~ --COMPARISON OF PUBLICATION DATES: 1960 AND 1950 CENSUSES OF POPULATION AND HOUSING<sup>a</sup>

| 1960 and 1950 census report series                          | First report      |                                       | Last report <sup>1</sup> |                                       | U.S. Summary      |                                       |
|---|-------------------|---------------------------------------|--------------------------|---------------------------------------|-------------------|---------------------------------------|
|   | Publication dates | Improvement (No. of months) 1960/1950 | Publication dates        | Improvement (No. of months) 1960/1950 | Publication dates | Improvement (No. of months) 1960/1950 |
| Population census   |                   |                                       |                          |                                       |                   |                                       |
| Advance reports (final counts):                             |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PC(A1) and Nos. 1-8 of Series PC(S1)....       | 8/60              | } 3                                   | 6/61                     | } 17                                  | 11/60             | } 0                                   |
| 1950, Series P-C-8,9,10,11.....                             | 11/50             |                                       | 11/52                    |                                       | 11/50             |                                       |
| Advance reports (final data on characteristics, by State):  |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PC(A2), PC(A3).....                            | 10/60             | } -                                   | 3/62                     | } -                                   | 3/61,4/62         | } -                                   |
| 1950 (no comparable series).....                            | -                 |                                       | -                        |                                       | -                 |                                       |
| Number of Inhabitants:                                      |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PC(1)-A.....                                   | 9/60              | } 10                                  | 5/61                     | } 16                                  | 6/61              | } 9                                   |
| 1950, Series P-A.....                                       | 7/51              |                                       | 9/52                     |                                       | 3/52              |                                       |
| General Characteristics:                                    |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PC(1)-B, PC(1)-C.....                          | 11/60             | } 16                                  | 7/62                     | } 16                                  | 9/61,7/62         | } 19,9                                |
| 1950, Series P-B.....                                       | 3/52              |                                       | 11/53                    |                                       | 4/53              |                                       |
| Detailed Characteristics:                                   |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PC(1)-D.....                                   | 3/62              | } 9                                   | 1/63                     | } 11                                  | 4/63              | } 5                                   |
| 1950, Series P-C.....                                       | 12/52             |                                       | 12/53                    |                                       | 9/53              |                                       |
| Housing census  |                   |                                       |                          |                                       |                   |                                       |
| Advance reports (final counts and data on characteristics): |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series HC(A1), HC(A2), HC(A3).....                    | 11/60             | } 9                                   | 7/62                     | } 14                                  | 4/61,6/62,5/62    | } 22,8,9                              |
| 1950, Series HC-7,8,9.....                                  | 8/51              |                                       | 9/53                     |                                       | 2/53              |                                       |
| City Blocks:  |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series HC(3).....                                     | 6/61              | } 4                                   | 3/62                     | } 5                                   | -                 | -                                     |
| 1950, Series H-E.....                                       | 10/51             |                                       | 8/52                     |                                       | -                 |                                       |
| States and Small Areas:                                     |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series HC(1).....                                     | 12/61             | } 6                                   | 10/63                    | } -2                                  | 7/63              | } -1                                  |
| 1950, Series H-A.....                                       | 6/52              |                                       | 8/53                     |                                       | 8/53              |                                       |
| Metropolitan Housing:                                       |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series HC(2).....                                     | 7/62              | } 5                                   | 7/63                     | } 13                                  | 1/63              | } 19                                  |
| 1950, Series H-B.....                                       | 12/52             |                                       | 8/54                     |                                       | 8/54              |                                       |
| Population and housing census tract reports                 |                   |                                       |                          |                                       |                   |                                       |
| 1960, Series PHC(1).....                                    | 10/61             | } 3                                   | 8/62                     | } 6                                   | -                 | -                                     |
| 1950, Series P-D.....                                       | 1/52              |                                       | 2/53                     |                                       | -                 |                                       |

- Represents zero.

<sup>1</sup>Excluding U.S. Summary.

<sup>a</sup>Reprinted from-- United States Bureau of the Census. United States Censuses of Population and Housing: Procedural History, 1960. op.cit. p. 362.